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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2020
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTEENTH CONGRESS
FIRST SESSION
—
FULL COMMITTEE HEARING
ON
**THE FISCAL YEAR 2020 NATIONAL
DEFENSE AUTHORIZATION BUDGET
REQUEST FROM THE DEPARTMENT
OF DEFENSE**
—

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**THE FISCAL YEAR 2020 NATIONAL DEFENSE
AUTHORIZATION BUDGET REQUEST FROM
THE DEPARTMENT OF DEFENSE**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Tuesday, March 26, 2019.

The committee met, pursuant to call, at 10:00 a.m., in room 2118, Rayburn House Office Building, Hon. Adam Smith (chairman of the committee) presiding.

OPENING STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. Thank you. A couple of process issues to start. The Secretary has said that he can be here till 3:00, which calls into question, you know, just how big of a masochist he is, but we do appreciate the ability to be here that long. We are going to take a break at 12:15, from 12:15 to 12:30, and then we will resume. We don't have to go to 3 o'clock, but we want to try to give members as much time as possible, understanding the importance of this hearing.

With that, I call the hearing to order. I want to thank the Honorable Patrick Shanahan, Acting Secretary of Defense; General Joseph Dunford, Chairman of the Joint Chiefs of Staff; and the Honorable David Norquist, who is performing the duties of the Deputy Secretary of Defense.

First note, I believe this will be the last, probably the last time that General Dunford testifies before our committee. He has held many roles within the military. And I just want to say, on a personal note, is that it has been a great pleasure working with you. You have served your country incredibly well, do an outstanding job, and we have always had a very open dialogue. We all know that there are tensions between the Pentagon and Congress, but you have done an outstanding job of truly, you know, letting us know you care what we think, you want to work with us, you want to make this process work. I really appreciate your leadership.

And Mr. Shanahan and Mr. Norquist, this is both your first hearings in your current acting roles. As I discussed with the Secretary yesterday, there is getting to be sort of a Bud Selig joke here. For those of you who follow baseball, he was made the baseball chairman and then he was the acting chairman for life, because he kept in that spot but they never made him permanent. So we are hoping that doesn't happen in your case as well, but we appreciate your service and look forward to your testimony.

These are, as always, very challenging times. As we have said on this committee for quite a few years now, it is hard to imagine a time in American history when we have had such a complex threat environment. Certainly, there have been times in our history where we have been at greater peril, but here the dangers come from a multitude of different sources. And it really takes an incredible amount of work and understanding to figure out how do we meet all of those threats in a comprehensive way. We cannot do everything we would like to do. How do we make sure we do what we have to do? So we have to meet that threat environment.

And the basic task, as I see it, of the Department of Defense and our committee is, number one, clearly, meet our national security objectives, figure out what they are, and make sure we are meeting them. And one of the biggest there is to deter our adversaries, and that can come in many forms. At the moment, it is primarily Russia, China, transnational terrorist groups, North Korea, and Iran. What are we doing to deter them from their actions?

And then lastly and most importantly, is to make sure that the men and women who serve in our military are trained and equipped and 100 percent prepared to carry out whatever mission we ask them to do. Those missions will change as the threat environment changes, as our resources change, but the one thing we never want to do is create a situation where we are asking them to go into a fight that they are not prepared for. We are incredibly well served by the men and women in our military. Without question, the best, strongest, most capable military in the history of the world, and it wouldn't happen but for the people serving. We need to make sure that we give them the tools they need to do their job.

As I go forward, the greatest challenge to all of this is somewhat, you know, surprising in that it is the budget and the uncertainty that comes with it. Ever since the Budget Control Act in 2011, the entire discretionary budget has gone through a number of shutdowns. At this point, I forget if it was three or four, countless other threatened shutdowns, countless continuing resolutions, and a level of budget uncertainty that has made it impossible to plan. From one month to the next, you do not know how much money you are going to have and you don't know where you are going to be able to spend it. And that created an enormous number of problems.

Now, we have made progress on that. We also, because of the wars in Iraq and Afghanistan, had a readiness shortfall, which I know you have worked very hard on and it is getting better. We look forward to hearing the specifics about how we have improved on that.

And then also, when we got the budget deal for 2018 and 2019, we finally put in about 18 months of, while certainty is too strong a word, but predictability. Now, 2018 wasn't perfect, because you didn't get it until 6 months into the fiscal year and then had to figure out how to spend that money in a very short timeframe. But for 2019, on October 1, the Department of Defense knew what its budget was going to be for the full year. And I believe that was the first time in 7 years that that was the case. That is enormously helpful.

Now, unfortunately, as we head towards 2020, we are now at risk of falling back into the old ways, which is really too bad. We

have 2 years left of the Budget Control Act. And I know there is bipartisan consensus in the House and the Senate to get a deal for those last 2 years. Unfortunately, the budget that was submitted by the President and the Department of Defense dramatically undercuts our ability to get that deal.

First of all, it sticks—well, it claims to stick to the Budget Control Act numbers, but it does two things that are incredibly problematic. One, it cuts all nondefense discretionary money by 5 percent, and that is by 5 percent below the Budget Control Act number for 2020. It is an even greater cut from what we put into those programs last year. And then it uses the overseas contingency operations [OCO] fund as a slush fund. It takes that money and says because it is off budget, we can pump I think it is well over \$90 billion into base budgeting out of the OCO and claim that we have stuck to the Budget Control Act numbers. That is breathtakingly irresponsible. And no greater authority on that subject than current chief of staff Mick Mulvaney said exactly that.

Now, he said it 3 years ago when he was a Member of Congress and not trying to weasel his way around the budget problem as a chief of staff. But he made it clear that OCO should not be a way to sneak around the budget caps, and yet that is the heart and soul of the budget going forward.

And there are a couple of problems with this, the biggest one of which that budget is not going to pass. There is bipartisan opposition to it, and I can assure you the Democratic-controlled House is not going to pass a budget that creates \$174 billion OCO and guts every other aspect of funding.

So how do we get back from there? How do we get to the point where we were, I believe, in November and December where we were just this close to a budget deal for 2020 and 2021 that gives us a degree of certainty, that can give us that predictability and get us to the end of the Budget Control Act. There is no good reason to do this.

Artificially sticking to those budget caps has almost nothing to do with fiscal responsibility. I know that is the thought. Well, gosh, we can say we stuck to the budget caps. We can claim that we are being fiscally responsible.

The discretionary budget is 25 percent of the overall budget and has nothing to do with revenue. It is only a tiny portion of our overall debt and deficit picture. And to jeopardize all of that to get no particular gain on fiscal responsibility is, to my mind, incredibly irresponsible.

And the last problem with all of this is we constantly talk in this committee about a whole-of-government approach. We have had many people from the Pentagon, most notably and most articulately, as is often the case, with Secretary Mattis, who said, if you are going to cut the State Department, you better give me more ammunition. The State Department gets cut by 25 percent in this budget, Development gets cut by just about the same, Homeland Security. Every other piece of this whole-of-government approach gets gutted in this budget, except to make sure that we can have a 10 percent or 8 percent or whatever it is increase in military spending.

And I just—I can't have people from the Pentagon come up here and wax nostalgic about how much they love the State Department

while we gut their budget. You know, a whole-of-government approach requires that. And we get into a self-fulfilling prophecy if we don't fund these other tools. And by the way, the military is not the only way to deter our adversaries. We can work with partners. We can use diplomacy. There are a ton of things we can do so that we don't have to rely on the blunt instrument of the U.S. military. But it will not work if we gut that budget.

Just two final points I have to make. You know, the comment that funding a border wall out of the Department of Defense is also unbelievably irresponsible. And I won't even get into the debate here about the wisdom of that border wall. We can do that at another time. But what everyone feels about the border wall, to look at the Pentagon as sort of a piggybank/slush fund where you can simply can go in and grab money for something when you need it really undermines the credibility of the entire DOD [Department of Defense] budget. Because if you have got \$5- to \$10- to \$20 billion just lying around at the Pentagon for any particular purpose, then what does that say about whether or not you really need the money that you come up here telling us that you need?

So this committee, and I know there has been bipartisan expression to this, is unalterably opposed to taking money out of DOD to fund the border wall. And in particular—well, I will get into the reprogramming issue in my questions.

But the last point that we want to emphasize: the audit. We need the Pentagon to start spending the money more wisely than it has been spending it. And I really want to thank my partner on this committee, Ranking Member Thornberry, for his work even before he was chairman of the committee. His understanding of acquisition and procurement is second to none in this committee. And he has worked very, very hard to try to put legislation in to improve the efficiency, to make sure that we are spending the money wisely. Too much money has been wasted at the Pentagon. We need the audit. At a minimum, we need to know where you are spending your money. We don't know that, there is really no way to get to efficiency. So we are going to keep pushing on that.

And then we need to get better about the systems that we fund. The F-35 is unbelievably over budget. We have the aircraft carrier, even now as it is delivered, it is having problems with elevators and launch systems. The tanker, you know, they are finding debris inside of the tanker from when it was made. There is just a lack of efficiency. And there are programs throughout the nineties, the Future Combat Program, that spent billions of dollars towards no particular end. The expeditionary fighting vehicle where we spend \$8 billion before deciding that we weren't actually going to build it.

I believe that the Pentagon can get by with a lot less money if we had a full audit and we spent that money better. And we want to make sure that we are moving in that direction.

With that, I thank you for being here. I look forward to your testimony, and I yield to the ranking member.

**STATEMENT OF HON. WILLIAM M. "MAC" THORNBERRY, A
REPRESENTATIVE FROM TEXAS, RANKING MEMBER, COM-
MITTEE ON ARMED SERVICES**

Mr. THORNBERRY. Thank you, Mr. Chairman.

Secretary Shanahan, welcome to the House Armed Services Committee. You have met with the committee in other places in other capacities, but this is the first time you have testified in this way, so welcome.

General Dunford and Mr. Norquist, welcome back.

General Dunford, I am not quite ready to let you go yet, so just be warned that you may be back in some way or another, given what the chairman said the complex nature of the threats and security environment in which we all operate.

Mr. Secretary, you may find yourself the target of a lot of criticism for decisions that you had nothing to do with today. I hope that is not the case. I, for example, share the chairman's view that we should not take Department of Defense resources and use it for other purposes. I know that that was not a decision you made, but I hope that most of what we can talk about today are those things within the purview of the Department of Defense. Because I agree with much of the chairman's comments that budget uncertainty, largely because of Congress and the previous administration, has caused enormous problems for the Department of Defense and the men and women who serve. And yet we have started to make some real progress.

We have started—had a good start in improving readiness of our forces. And all of us who have been on the committee previously have been concerned about the number of casualties and other things because of accidents, which were unfortunately increasing at an alarming rate. It was not just because of the pace of operations, that certainly contributed, but it was also because of about a 20 percent cut in defense funding starting in 2010.

We have started to make progress on improving our position versus peer competitors. Now, we haven't caught up where we need to be yet, but—and in key areas, they are still ahead of us, but we have started to make progress. And we have even started to make progress in treating our people right.

I think you are going to—for example, this committee is going to focus on housing issue. There are some spouse employment issues. There are still a lot of things we need to do. But when you look back the last few years on pay, health care, retirement, et cetera, we have started to make progress.

My bottom line is we need to keep making progress. We can't slide backwards. And I am very conscious of the fact that repeatedly, Secretary Mattis and you, General Dunford, have testified that a minimum of 3 to 5 percent real growth in the defense budget is necessary to continue to make progress, both on readiness, in holding our own at least with peer competitors.

I also note that the national strategy commission, which was composed of an equal number of Republicans and Democrats, looked at this for some time and they endorsed that 3 to 5 percent real growth. That is exactly what the President's budget—just about what the President's budget comes in at. I share the concerns about other parts of the budget. And I completely agree we

are not ever going to pass \$174 billion OCO, but that goes back to decisions that were made somewhere else other than the Department of Defense.

I appreciate all three of you and the work that you put in. We need to be your partners to continue to make progress on readiness, on treating our people right, on the peer competitor issues that concern us all. So we will get into a lot of those today.

Thank you all again for being here. I yield back.

The CHAIRMAN. Mr. Secretary.

STATEMENT OF HON. PATRICK M. SHANAHAN, ACTING SECRETARY OF DEFENSE, DEPARTMENT OF DEFENSE; ACCOMPANIED BY DAVID NORQUIST, COMPTROLLER AND CHIEF FINANCIAL OFFICER, AND ACTING DEPUTY SECRETARY, DEPARTMENT OF DEFENSE

Secretary SHANAHAN. Chairman Smith, Ranking Member Thornberry, distinguished members of the committee, thank you for this opportunity to testify in support of the President's budget request for fiscal year 2020.

I am joined by Chairman of the Joint Chiefs of Staff, General Joseph Dunford, and the Department's Comptroller and Chief Financial Officer, Mr. David Norquist.

It has been a great privilege and honor to serve alongside the men and women of the Department of Defense. And it was a pleasure to work with Secretary Mattis to craft the 2018 National Defense Strategy.

Released in January 2018, that strategy laid the foundation for restoring military readiness and modernizing our joint force for an era of great power competition. I now oversee the continued execution of that strategy, which is the undisputed driver of today's budget request.

It was extremely helpful for the Department to receive authorization and appropriation bills on time and at the requested top line last year. With 87 percent of Congress in bipartisan support, last year marked the earliest signing of an authorization bill in four decades.

The strategy you supported last year is the same strategy we are asking you to fund this year. The \$750 billion top line for national defense enables DOD to maintain irregular warfare as a core competency, yet prioritizes modernization and readiness to compete, deter, and win in any possible high-end fight of the future.

This budget is critical for the continued execution of our strategy, and it reflects difficult but necessary decisions that align finite resources with our strategic priorities.

To highlight some of those decisions, this is the largest research, development, testing, and evaluation [RDT&E] budget in 70 years. The budget includes double-digit increases to our investments in both space and cyber, modernization of our nuclear triad and missile defense capabilities, and the largest shipbuilding request in 20 years, when adjusted for inflation. It also increases our total end strength by roughly 7,700 service members, and provides a 3.1 percent pay increase to our military, the largest in a decade.

Now to the specifics. The top line slates \$718 billion for the Department of Defense. Of that total, the budget includes \$545 billion

for base funding and \$164 billion for overseas contingency operations. Of the overseas contingency operation funds, \$66 billion will go to direct war and enduring requirements and \$98 billion will fund base requirements. To round out the numbers, \$9.2 billion will fund emergency construction. That includes an estimated \$2 billion to rebuild facilities damaged by Hurricanes Florence and Michael; up to \$3.6 billion to support military construction projects that will be awarded in fiscal year 2020 instead of fiscal year 2019, so we can resource border barrier projects under emergency declaration this year; and \$3.6 billion in case additional emergency funding is needed for the border.

Military construction on the border will not come at the expense of our people, our readiness, or our modernization. To identify the potential pool of sources of military construction funds, DOD will apply the following criteria. No military construction projects that have already been awarded and no military construction projects with fiscal year 2019 award dates will be impacted. We are solely looking at projects with award dates after September 30, 2019. No military housing, barracks, or dormitory projects will be impacted.

Decisions have not been made concerning which border barrier projects will be funded through section 2808 authority. If the Department's fiscal year 2020 budget is enacted on time as requested, no military construction project use to source section 2808 projects will be delayed or canceled.

I appreciate the inherent intra-government complexities of the southwest border situation. I also want to emphasize the funds requested for the border barrier amount to less than 1 percent of the national defense top line.

As this committee fully understands, no enemy in the field has done more damage to our military's combat readiness in years past than sequestration and budget instability. And there is no question today, our adversaries are not relenting.

The instability of a continuing resolution [CR] would cost us in three important ways. First, we would be unable to implement new initiatives like standing up the Space Command or accelerating our development of hypersonic capabilities and artificial intelligence. Second, our funding will be in the wrong accounts. We are requesting significant investments in RDT&E for cyber, space, and disruptive technologies, and at O&M [operations and maintenance] for core readiness. Third, the incremental funding under a CR means we lose buying power. This translates to higher costs and uncertainty for industry in the communities where we operate.

We built this budget to implement our National Defense Strategy, and I look forward to working with you to ensure predictable funding so our military can remain the most lethal, adaptable, and resilient fighting force in the world. I appreciate the critical role Congress plays to ensure our warfighters can succeed on the battlefield of both today and tomorrow. And I thank our service members, their families, and all those in the Department of Defense for maintaining constant vigilance as they stand, always ready to protect our freedoms.

Thank you.

[The prepared statement of Secretary Shanahan can be found in the Appendix on page 79.]

The CHAIRMAN. Thank you.
Chairman Dunford.

**STATEMENT OF GEN JOSEPH F. DUNFORD, JR., USMC,
CHAIRMAN OF THE JOINT CHIEFS OF STAFF**

General DUNFORD. Chairman Smith, Ranking Member Thornberry, distinguished members of the committee, thank you for the opportunity to join Secretary Shanahan and Under Secretary Norquist today. It remains my privilege to represent your soldiers, sailors, airmen, and Marines.

While much of our discussion this morning is going to focus on the challenges we face, it is important I begin by assuring you that your Armed Forces can deter a nuclear attack, defend the homeland, meet our alliance commitments, and effectively respond should deterrence fail.

I believe today we have a competitive advantage over any potential adversary, defined as the ability to project power and fight and win at the time and place of our choosing. But as members of this committee well know, 17 years of continuous combat and fiscal instability have affected our readiness and eroded the competitive advantage we enjoyed a decade or more ago.

As the Secretary highlighted, China and Russia have capitalized on our distraction and restraints by investing in capabilities specifically designed to challenge our traditional sources of strength. After careful study, the developed capabilities intended to contest our movement across all domains—sea, air, space, cyberspace, and land—and disrupt our ability to project power.

With the help of Congress, starting in 2017, we began to restore that competitive advantage. Recent budgets have allowed us to build readiness and invest in new capabilities, while meeting current operational commitments. But we cannot reverse decades of erosion in just a few years.

This year's budget submission would allow us to continue restoring our competitive advantage by improving readiness and developing capabilities to enhance our lethality. It proposes investments in advanced capabilities across all domain: sea, air, land, space, and cyberspace.

This year's budget also sustains investments in our nuclear enterprise to ensure a safe, secure, and effective strategic deterrent, the highest priority of the Department of Defense. We have also taken steps to more effectively employ the force we have today and build a force we need for tomorrow. We have implemented fundamental changes in our global force management process to prioritize and allocate resources in accordance with the National Defense Strategy, while building readiness and the flexibility to respond to unforeseen contingencies.

We have also refined our process for developing and designing the future force. A joint concept, threat-informed approach supported by a wide body of analytic work allows us to more deliberately evaluate and prioritize warfighting requirements. This also enables us to pair emerging technologies with innovative operational concepts.

In closing, I would like to thank the committee for all you have done to support the men and women in uniform and their families.

Together we have honored the solemn obligation to never send our sons and daughters into a fair fight. And with your continued support, we never will.

[The prepared statement of General Dunford can be found in the Appendix on page 100.]

The CHAIRMAN. Thank you both. I appreciate that.

Keeping in mind and acknowledging Ranking Member Thornberry's point that you don't make the policy necessarily that you are sent up here to defend, regrettably, neither President Trump nor Chief of Staff Mulvaney are going to testify before our committee, so we have to ask you about it and get your defense/explanation.

And one of the biggest areas in the wall funding that is problematic for this committee and for the relationship between the Pentagon and Congress is the reprogramming requests. And it is, you know, a bit of sort of arcane policy that even I didn't fully understand. But by and large, the Pentagon is not allowed to simply move money from one account to another, without coming back through the full legislative process.

But given the amount money at the Pentagon and given how much things change, we have given, through the congressional process, the ability to reprogram, I think it was \$4 billion last year. But one of the sort of gentleman's agreements about that was if you reprogram money, you will not do it without first getting the approval of all four relevant committees: Defense Appropriations in the House and the Senate, and Armed Services in the House and the Senate.

For the first time since we have done that on the reprogramming request to help fund the wall, basically you are shifting money from the MILPERS [military personnel] account into the drug safety account, whatever it is, drug enforcement account, so that you can then take it out of the cap and put it to the wall, and you are not asking for our permission.

Now, you understand the result of that likely is that the Appropriations Committee in particular will no longer give the Pentagon reprogramming authority. Now, I think that is unfortunate, because they need it. And I guess my question is what was the discussion like about in deciding to break that rule, and what is your view of the implications for it going forward in terms of the relationship between the Pentagon and Congress in general? And specifically, how much is it going to hamper you to not have reprogramming authority after this year?

Secretary SHANAHAN. Chairman, what was the second part of that? What was the—

The CHAIRMAN. How is it going to hamper the relationship if you—I am sorry. How is it going to hamper your ability to do your job if you don't have any reprogramming authority going forward?

Secretary SHANAHAN. Right, yeah. Well, the discussion, I think—you know, I have also been party to this discussion—is that by unilaterally reprogramming it was going to affect our ability long term to be able to do discretionary reprogramming that we had traditionally done in coordination. It was a very difficult discussion. And we understand the significant downsides of losing what amounts to a privilege.

The conversation took place prior to the declaration of a national emergency. It was part of the consulting that went on. We said, here are the risks, longer term to the Department, and those risks were weighed. And then given a legal order from the Commander in Chief, we are executing on that order. And as we discussed, the first reprogramming was \$1 billion. And I wanted to do it before we had this committee hearing, because we have been talking about this for some time. And I have been deliberately working to be transparent in this process, fully knowing that there is downsides, which will hamper us.

The CHAIRMAN. And ultimately, you asked for—you asked for \$1 billion yesterday. Is it still the plan to ask for \$2.4 billion out of the drug enforcement account?

Secretary SHANAHAN. We haven't made the assessment of what—consider these increments or tranches, however you want to phrase them, potentially we could draw \$2.5 billion, when we look at the total general transfer authority. We think beyond that would be too painful to being able to continue [to] maintain readiness and operations, but we don't know what that next increment of funding would look like.

The CHAIRMAN. One final question on this piece. You are getting the money because I believe it is the Army or is it the Army and the Marine Corps that did not meet their end-strength goals?

Secretary SHANAHAN. Let me ask David Norquist.

Mr. NORQUIST. So the source of the money as you point out at the beginning is the military personnel account. The Army was falling short of its recruiting targets by about 9,000, 9,500. And so funds that would have gone to pay those soldiers had they been on board is no longer needed for that purpose. That military personnel account is more like a mandatory, in the sense that if there is no purpose, there is not a lot of other uses. And so it is available for reprogramming under those circumstances.

The CHAIRMAN. Understood. And so for the fiscal year 2020 budget, does your personnel request reflect that inability to recruit? Do you sort of factor in, okay, we would like to have this many, but we are not? Does it make sense to give you the same amount of money for MILPERS if it is just going to wind up in the drug enforcement account and then go to building a wall?

Secretary SHANAHAN. I believe we did that.

Mr. NORQUIST. Yes. So we went ahead and planned the 2020 budget off of the—the Army revised its expectations for next year accordingly, and that is the number that is in the 2020 budget, sir.

The CHAIRMAN. Okay. Final question. So when it comes to the budget, overall budget number—and I do have a slight quibble with the idea that somehow this is all a problem because the Obama administration cut defense. I think to the extent that we rely on that political talking point it undercuts the fact that this all happened because of the battle over the budget. I mean, the Budget Control Act wasn't passed because the Obama administration decided they wanted to do it. It was passed because we were literally 2 days away from not paying our debts. There was a refusal by the then Republican-controlled Congress to raise the debt ceiling. And the only deal to be able to raise the debt ceiling was to agree to sequestration in the Budget Control Act. It was a bipartisan act of—well,

self-flagellation, if you will, in terms of messing up our budget for 10 years to come just because we didn't have the political courage to live with the consequences of the money we had already spent. And that led to no end of problems, but it was a bipartisan problem.

And really, it is a bipartisan unwillingness to address the reality that you can't balance the budget while cutting taxes and increasing spending. A choice has to be made. We decided not to make that choice. We decided to punt it into the artificial Budget Control Act, Sequestration Act. So a little greater honesty about the budget choices we face is the best way out of this, not, you know, any fault of the Trump administration or the Obama administration.

But the question I have—and, General Dunford, take a stab at this—the President at one point, I don't know, several months ago said that he felt a \$700 billion defense budget made sense. Several days after that, you know, they had settled on—well, before that, there was the \$733 billion number, which people had talked about as I think what was reflected in the—you know, plus inflation, the 5 percent number that a bipartisan group had come up with. So, you know, it had been 733, the President said, you know, I think we can do 700. And there was back and forth, a bunch of people talked to him, and then it became 750. Okay?

And, you know, one of the things on the credibility here is we always hear from you guys, we absolutely have to have this money. I think that way one general testified, he said, anything below 733 creates an unacceptable amount of risk. I kind of find that hard to believe. Is now the statement anything below 750 becomes an unacceptable amount of risk? Where is the rigor in terms of what that number is to make sure that it is truly funding what our national security needs are, if that number can move \$50 billion in the space of a few tweets?

General DUNFORD. Chairman, I can address the specific part of the budget that talks to joint warfighting capabilities, and that represents, as Ranking Member Thornberry pointed out, about a 2.9 percent real growth increase over last year.

In the terms of analysis, going back to 2015, we did a detailed analysis at the top secret level of all of what we call competitive areas: space, cyberspace, electronic warfare, maritime capability, land, and so forth. So we looked at ourselves and then we looked at what we had in the plan going out to 2025. And then we worked with the intelligence community and we did a similar study of China and Russia, the benchmark, if you will for our path of capability development. Then we looked at the trajectory of capability development that Russia and China were on. And we looked at what should our force look like in 2025 to make sure that we had a competitive advantage. Again, that competitive advantage defined as the ability to—

The CHAIRMAN. As a result of that process, you came up with the \$733 billion number. Correct?

General DUNFORD. That number is completely informed by the analysis we did for the path of capability development. Yes, Chairman.

The CHAIRMAN. Okay. It is just worth noting that the President's request was for 750, despite all that analysis that said 733. So that

is the type of rigorous analysis I think we need to get to a number, not just deciding we want to spend more money for the sake of spending more money. So I appreciate that.

I want to get to some other people here, so I am going to yield to Mr. Thornberry.

Mr. THORNBERRY. Let me just mention that I completely agree with the chairman, both parties are responsible for the irresponsible approach we took to funding defense. And I also agree with the chairman that changing decades of reprogramming practice is going to have difficult consequences for the whole government, but especially for the Department of Defense.

Mr. Secretary, you heard me reference testimony that we and the Senate have repeatedly received from Secretary Mattis and also from General Dunford about the need for at least 3 to 5 percent real growth through 2023, and that that figure was endorsed by the bipartisan national strategy commission. I don't recall that you have ever weighed in on what sort of topline growth. And there is lots of discussion underneath the top line. I am just talking about a top number. What sort of topline level is necessary for us to continue to repair readiness and also deal with the complex threats posed by Russia, China and others?

Secretary SHANAHAN. Thank you, sir. You know, quite often, people will not kind of pick a number, they will look over time and say, you know, an aggregate, what should a number be or what should a trend be. But going back to Chairman Dunford's comments on rigor and analytics behind the way we have put together the National Defense Strategy, there are three trends that are very important that factor into the rate of growth. This is a real growth rate, so adjusted for inflation.

First, the world continues to get more dangerous, and so that really manifests itself in troop strength. The second component is we are still recovering readiness. Those are, you know, real accounts that we have to restore and sustain. And probably the biggest driver for our growth is modernization. With great power competition and a focus on Russia and China, we haven't modernized in three decades. And the investment required to do that in parallel with those three other activities drive 3 to 5 percent real growth, if we want to do it in a timely manner. This is all about how much risk and how much time we want to, you know, assume. I don't think we have enough time to address these issues. That is why you need the greater growth.

Mr. THORNBERRY. And so I guess the flip side is without 3 to 5 percent real growth, we are taking increased risk. We cannot accomplish the three things that you talked about.

Secretary SHANAHAN. Yeah, I think, you know, it is—sometimes risk gets too broadly characterized. I look at the risk really into kind of two elements. You can take operational risk or risk on modernization. So the difference between the \$700 billion number and the \$733 billion was deciding where you want to take risks. So do we want to invest in modernization and have a smaller force or do we want to have a larger force to deal with the threats of the world and forgo some of the great power competition? I believe we have to do both. And when I think of the risks, those are the two we have to manage.

Mr. THORNBERRY. General Dunford, I am not sure that you and the chairman were exactly communicating. When you talked about the analysis that y'all performed, did that result in a defense request—actually, it is national security request of \$733 billion? If so, where did the 3 to 5 percent real growth come from? Because \$733 billion is not 3 percent real growth.

General DUNFORD. Thank you, Ranking Member Thornberry, for allowing me to clarify. What I was speaking about is inside the budget, the piece that I provided recommendations on were the military capabilities inside the budget, those things that will directly contribute to joint warfighting. And in that area, I am confident of the analysis that we did, and I am confident that the budget reflects a 2.9 percent real growth in joint warfighting capabilities.

Mr. THORNBERRY. Okay. So do you have any amendments or change to the testimony that you have given us before that 3 percent real growth is necessary to stay even, 5 percent real growth is necessary to catch up on China, Russia, and readiness problems?

General DUNFORD. I don't have any change to that at all. That is exactly what our analysis highlights.

Mr. THORNBERRY. Okay. Thank you. I yield back.

The CHAIRMAN. Mrs. Davis.

Mrs. DAVIS. Thank you, Mr. Chairman. And thank you to all of you for joining us today. And particularly to General Dunford, it has been a privilege and really an honor to work with you over the years.

I had a visit to the border and to our troops really a few days ago. And in light of that, I wanted to just address some of the issues that the chairman just mentioned, because I think there has been some confusion. And as you are talking about the need to really, you know, focus more on national security needs, of course, and readiness, you know, that raises the question of why we are not trying to really answer the issue that is in front of us when it comes to the personnel at the border. Because the situation that we are in right now is just not sustainable. I think we all acknowledge that.

So having been on the border, we are about 3,000 short in terms of personnel there. And that makes the situation difficult, as you can well imagine, in part of what we are trying to deal with. Can you speak a little more specifically to what is happening, what just happened in terms of the transfer of money? And when is that going to be done? Is that done? Is it still in process?

Secretary SHANAHAN. David, do you want to give the status of the reprogramming?

Mr. NORQUIST. So the reprogramming went to the committee yesterday. And that is the notification of the intent to move the money from one account to another. It wouldn't be used until it was obligated onto a contract. Those, of course, take some amount of time. We want to make sure the committee is aware of this, so we are not trying to rush things. We just want to do it in deliberation. But that will move at the point when it is necessary to award another contract. We just want to make sure the committee has the notification that we are moving it from one to the other, and that—

Mrs. DAVIS. Could you speak to the nature of those contracts as well?

Mr. NORQUIST. Oh, those are construction contracts for border barriers.

Mrs. DAVIS. Okay. And, as you said, you haven't started that process yet?

Mr. NORQUIST. In terms of?

Do you want to talk about the process or do you want me to? Okay.

So just to go back through the overall process for 284. With the authority of the 284, we received a request for assistance from the Department of Homeland Security. It was received by the Secretary. He then tasked out to the Department to do our analysis, Joint Staff, general counsel, comptroller, and others, and to come back with identifying which of those construction projects are appropriate.

One of the requirements is interdicting drug corridors. That analysis has been done. He has identified a set of projects to use those fundings for. And one of the steps before we can move the money is to send a notification to the committee. The date when the money literally changes colors inside the financial system depends, but it needs to be moved prior to any contract being awarded.

Mrs. DAVIS. Okay. And you said that the money is coming from the unallocated end strength for the Army?

Mr. NORQUIST. It is coming out of the military personnel account. It was provided for end-strength recruitment that didn't happen, and that is why it is available.

Mrs. DAVIS. And is that something that goes forward? Are you not worried that that is going to make a difference down the line?

Mr. NORQUIST. Well, that money is only available till 30 September. So it is not one of those accounts that would carry over from one year to the next. So the amount of funding the Army needs in fiscal year 2020 is a number that is requested in the fiscal year 2020 budget and this committee would need to access separately.

Mrs. DAVIS. But you spoke of making adjustments, though, down the line since you see that that is—you are not able to meet those targets.

Mr. NORQUIST. The Army made adjustments, as the chairman asked earlier, in its 2020 budget reflecting the fact that it was not meeting its original 2019 target. So we are not asking for more money in 2020 that we would not be able to use again. We made sure we accounted for those concerns.

Mrs. DAVIS. Okay. But we also know that, basically, Congress had denied President Trump's request for the dollars to build the border wall. And here we are. I know you said it was a difficult decision because it sets precedent. How are we going to address these issues?

Mr. NORQUIST. So when we receive the, in this case, the request from DHS [Department of Homeland Security], we go through the evaluation process. We understand that there are other issues going on with the Congress. But this is the direction we received from the administration regarding the RFA [request for assistance]

and this is how we evaluated and responded to that request for assistance.

Mrs. DAVIS. Thank you. I have to say, I mean, I am very concerned that we are not able to meet our needs on the border in terms of our Border Patrol agents. But there are reasons for that, and we can deal with them in our budget and we can deal with them in a way that we respond to this issue.

The CHAIRMAN. The gentlewoman's time has expired.

Mrs. DAVIS. I am afraid we are not going to get to the real—

The CHAIRMAN. Mr. Turner.

Mr. TURNER. Thank you, Mr. Chairman.

Mr. Secretary, we are asking the Department of Defense to do three major things that we don't usually ask them to do all at once. And the first is, is rebuild the military as a result of our readiness crisis. The second is to complete the modernization that is currently on our books. And the third is to look to the future, to already say that our near-peer adversaries are beginning to threaten our superiority and to plan for modernization.

Now, we have given you in fiscal year 2018 and 2019 the beginnings of rebuilding the military. We are planning, of course, for 3 to 5 percent real growth. But we have a number of things to do.

I want to associate my comments with the chairman on a number of areas in which we have bipartisan support. We have bipartisan support for the fact that our military budget should not be cannibalized for our border security needs. However, we have bipartisan disagreement on how to accomplish that, because I believe that Congress needs to fund closing the border, and certainly the House voted last year to do so.

I agree with the chairman with respect to we have bipartisan support that OCO should not be used. And I appreciate his comments that hopefully we will have a bipartisan budget agreement for 2 years to see specs, because I know it has effects on your operations. And then thirdly, his statement that bipartisan support for an audit and making certain that the Department of Defense can effectively tell us how the funds are being used.

But all those things, managing them, whether it is bipartisan support of constraints on you still translate to we need you to be able to effectuate modernization, rebuilding, and at the same time ending our crisis on operations.

So I am ranking member on the Strategic Forces Subcommittee. I am going to ask you both, General Dunford and yourself, issues concerning nukes. We have had on the books nuclear modernization that is needed, not just because our adversaries are beginning to bypass us in their own modernization, but because of the aging inventory or aging capabilities.

Mr. Secretary, even if Russia and China were not modernizing, could you please articulate why we have a need to modernize our nuclear weapons stockpile and that creates a current threat for our nuclear stockpile to remain an active deterrent? Mr. Secretary.

Secretary SHANAHAN. Sure. The first most fundamental issue is obsolescence. You know, we look at the Minuteman III program at the end of the decade it simply times out. The bomber program, capacity and capability to deliver nuclear weapons. So, you know, first and foremost, this is really about a nuclear enterprise that has

run its course in time. There is another very critical element to this and that is the nuclear—the NC3 capability—command, control, and communication—which is even, you know, more complicated than just replacing the ballistic missiles.

Mr. Chairman.

Mr. TURNER. General Dunford, if I could add as you are beginning to answer, could you please also add to your answer the issue of the triad and the issue that we have with the vulnerability as an effective deterrent? Because, you know, currently, obviously our subs have some ability to avoid detection. Tomorrow that could not be the case, and we would be in a very tough situation if we did not have the triad. General, could you explain that to us?

General DUNFORD. Congressman, thanks. First, just to reinforce what the Secretary said, we use three adjectives to describe the nuclear enterprise: safe, reliable, and effective. And so your question was even if Russia and China weren't modernizing, which they are, we would still have to modernize to make sure that we had a safe, reliable, and effective nuclear deterrent. And a particular area of concern, again notwithstanding what the Chinese and Russians are doing right now, is the aging nuclear command, control, and communications system. So we absolutely would have had to get after that.

Your question of triad is somewhat related. We have done two nuclear posture reviews since I have been the chairman. One during President Obama's administration, one during President Trump's administration. In both cases, we looked—people went into that with an open mind to see do we need to continue to maintain a triad to have an effective deterrent, and it was concluded that we needed to do that. Each leg of the triad has a unique capability, and it also complicates the adversary's ability to have a technological breakthrough that would undermine the credibility and the ability of our nuclear triad. So that is a big piece of it.

You talked about the submarines specifically, so I will address that. That gives us the most secure, the most safe leg of the triad, a reliable second strike. If you look at the bomber, it is an option that can be recalled. And if you look at the ground-based element of the nuclear deterrent, it is an element that complicates the adversary's targeting. And so again, each of those has an operational role but it also, in the aggregate, prevents a technological breakthrough that would undermine the credibility of our deterrent.

Mr. TURNER. Thank you, General.

Mr. Secretary, do we want Turkey in the F-35 program?

Secretary SHANAHAN. We absolutely do. We need Turkey to buy the Patriot.

Mr. TURNER. Thank you.

The CHAIRMAN. Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman.

Mr. Secretary, welcome before the committee in your current capacity. And, gentlemen, thank you all for your service and the work you are doing.

Mr. Secretary, I am going to start with you, if I could. The National Defense Strategy focuses on great power competition and places less emphasis on countering violent extremist organizations. USSOCOM [U.S. Special Operations Command] has been primarily

focused on counter violent extremist organization missions since 9/11, and geographic combatant commanders continue to have an insatiable appetite for SOF [special operations forces] and CT [counterterrorism] security cooperation and other missions. So I remain concerned about the demands placed on U.S. SOF and believe that we need to rethink our reliance on this force for every mission to ensure that it doesn't break from overreliance.

So, Mr. Secretary, has the Department considered a major force restructure review of USSOCOM to underscore and in order to determine what it needs to look like to fulfill title 10 core mission sets, maintain sustainable counterterrorism campaign, and also to ensure readiness for future conflict?

Secretary SHANAHAN. Thank you, Congressman. The focus of the Department has not been in separate title 10 capability but in capacity. Do we have sufficient capacity? As you described, there is constant tension to address a variety of global missions given the violent extremist organizations that continue to propagate around the world.

The chairman's role as the global integrator is to determine what is the risk balance that we need to maintain and what is the appropriate capacity. So our budget is really focused on do we have the right capacity, not necessarily the right structure, which is what I think you were alluding to.

I would just ask the chairman maybe to comment on how he prepares his global campaign plans into sizing the counterterrorism effort.

General DUNFORD. Congressman——

Mr. LANGEVIN. I am primarily concerned about getting——

General DUNFORD. Yeah. I think we share your perspective about both the overuse of special operations capability and the need for special operations capability to be relevant across the range of military operations. And so with that in mind, 2 years ago, it really is a force management issue. We adjusted deployment of special operations to be at a more sustainable rate. That does two things: One is addresses the human factors associated with overemployment, but the other is it allowed them then sufficient time to train for some of the high-end tasks associated with operations in the context of great power competition.

Mr. LANGEVIN. And how is the Department looking across the conventional forces to determine what missions and requirements could be filled by forces such as the Army Security Force Assistance Brigade versus SOF?

General DUNFORD. No, Congressman, a great question. And that is part of what we call the global force management allocation process. So we look at all the requirements that are identified by the combatant commander and we try to come up with the right sourcing solution for the combatant commander's task. But completely informing specific allocation decisions is the need for us to get to a sustainable level of operational deployment.

And again, over the last 2 years, we have pulled back the throttle, so to speak, to make sure that our forces are being employed at a more sustainable deployment to dwell rate.

Mr. LANGEVIN. I continue to remain concerned about overreliance on SOF, and we want to make sure we get that balance right.

Let me turn to another topic, Mr. Secretary, climate change. The fiscal year 2018 NDAA [National Defense Authorization Act] contained a provision that I authored that was supported by bipartisan majorities in this committee and in the full House, and instructed each service to assess the top 10 military installations likely to be affected by climate change over the next 20 years. Unfortunately, the report that was delivered in January ignored the clear instruction provided by law, failed to provide a ranking of installations, and not just looking at CONUS [continental United States] but worldwide, and lacked the methodological rigor required to adequately evaluate risks. In response to the concerns I raised, the Department came back yesterday with what I considered to be a half-baked rejoinder using the same methodology, a list of CONUS installations as the initial report.

Secretary Shanahan, I repeatedly made myself available to clarify the intent behind the language and the statute. No one from the Department has taken me up on the offer. Do you agree that climate change poses a threat to our readiness, to our ability to achieve military objectives?

The CHAIRMAN. And I am sorry, this is going to have to be a really quick answer because we are about out of time, but go ahead.

Secretary SHANAHAN. I believe we need to address resilience in our operations and our design and how we build out our facilities.

The CHAIRMAN. Thank you. And I should have said this at the beginning for the purpose of the witnesses. We try to keep it within 5 minutes, questions and answers, so try not to cut you off in mid-sentence if we can avoid it, but we want to make sure we get to as many people as possible.

Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman. And I thank all of you all for being here and for your service to our country.

Secretary Shanahan, I appreciate you taking the lead in the effort you put into the development of a Space Force in the Department of Defense.

The administration's Space Force proposal is very—the one that you sent over is very comprehensive. How would you prioritize the reform efforts within the DOD? Given the choice between a Space Force, U.S. Space Command, or Space Development Agency, which one do you think is most importantly pushed through today?

Secretary SHANAHAN. I would push for standing up of the U.S. Space Command, because it is the easiest and most impactful, followed then by the Space Development Agency.

Mr. ROGERS. Excellent. We have heard it argued that creating a space-centric force is anti-joint, that it flies in the face of the effort to make things more joint within the Department over the last 30 years. I would argue that the fragmented leadership in space has equally existed for the past 30 years. So my question is, how do you reconcile these two trains of thought? Does creating a Space Force go against the basic principles of jointness or how do you believe that such a move can contribute to a more joint-effective lethal warfighting in future conflicts.

Secretary SHANAHAN. No, I think it is enormously powerful to be able to create jointness. Two areas—and the chairman brought this up particularly around a procurement and delivering capability. We

have 10 different architectures going on in the Department in a variety of capabilities. Command and control is one of them. This is an opportunity to have commonality across the whole of the Department, something we have never been able to achieve. Space Force is that uniting construct. And then we also have a chance with the singular focus to drive much greater integration into the combatant commands.

Mr. ROGERS. Great. And can you elaborate on why you chose to put the Space Force in the Department of the Air Force as opposed to SOCOM-type structure?

Secretary SHANAHAN. The Air Force is where the skill is for space. So, I mean, most fundamentally as we reshape and reconstruct, you want to be where the people are that have the background. This is really more about a structural change. The SOCOM model, very different, the types of equipment and capabilities they develop are, I will say, much less complex than what we put on orbit. Air Force inherently has the skill set to manage and lead the Space Force.

Mr. ROGERS. Great. Thank you.

General Dunford, there has been a lot of debate over the value of the air, land, and sea legs of our nuclear triad. What is your best military advice as to how to balance these priorities?

General DUNFORD. Congressman, just for clarification, balance the priorities across the triad or across the Department's portfolio—

Mr. ROGERS. Across the triad.

General DUNFORD. Across the triad, Congressman, we have done, as you know, two nuclear posture reviews in the past 8 years; in fact, two since I have been the chairman. And both of those have indicated the need to modernize the triad. So we have in the program right now a plan to modernize all three legs of the triad. And to do that in a way that allows us—and that will represent, at the peak, 7 percent of the Department's budget, which means 93 percent of the Department's budget will be spent on other things other than the most important element of our Department's mission, which is nuclear deterrence.

Mr. ROGERS. Great. And can you tell the committee, in your best military advice, would you advise the adoption of a no-first-use policy?

General DUNFORD. I would not recommend that. I think anything that simplifies an enemy's decisionmaking calculus would be a mistake.

I am very comfortable with the policy that we have right now, which creates a degree of ambiguity. And I thought the way that it was articulated in our nuclear posture review is exactly right for the security environment that we find ourselves in right now.

Mr. ROGERS. Excellent. Thank you.

I yield back.

The CHAIRMAN. Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Chairman Dunford, you mentioned, I think perhaps in response to Chairman Smith's comments, a series of assessments you developed, in your words, as baselines to determine the state of what the competitive advantage is of the joint force.

I was curious, though, how we can articulate what a competitive advantage is by way of the Joint Military Net Assessment process if we haven't determined what competition is by way of investments and resourcing. And we have an idea of who we are competing against, but we don't seem to be necessarily choosing between all the tools that we can use versus the ones that won't be as successful in this competition.

Can you talk a little bit more about the science versus the art of this competitive advantage and these choices you make in investment and resourcing?

General DUNFORD. Oh, I absolutely can, Congressman.

First, in terms of the what we are trying to do, we went into this to say that Russia and China are the benchmark against which we measure our capabilities, and against Russia and China we want to be able to do two fundamental things: One, we want to move forces into the theater to meet our alliance commitments and advance our national interests, whether it is in Eurasia or it is in the Pacific; and then we say we want to be able to operate freely across all domains—sea, air, land, space, and cyberspace.

And so I think we actually have a fair degree of analytic rigor in looking at the challenges currently posed by China and Russia to our ability to project power and then achieve superiority in any of those domains at the time and place of our choosing to accomplish our mission.

And so this is very much benchmarked against campaign outcomes against those two peer competitors across all domains in the context of meeting our alliance commitments and advancing our national security.

So I would be happy to come up and spend more time talking to you about it. But, actually, I think we have a very clear target that we are shooting on. I think we have a very clear assessment of where we are today relative to where we need to be. And although we will refine the path along which we will maintain our competitive advantage in the future, I think we have a pretty clear sight picture of where we think we need to go over the next 5 to 7 years.

Again, it will be refined by war-gaming and exercises and so forth, but I think we have a pretty clear vision now of the cardinal direction that we need to go on to be able to do the kinds of things we anticipate needing to do.

Mr. LARSEN. I think I would like to take you up on that offer—

General DUNFORD. Sure.

Mr. LARSEN [continuing]. To come up and brief a little more on that.

I want to poke at this a little bit as well, though, because we get testimony from the Department on the advancements in supercomputing and AI [artificial intelligence]. And so we have set up the JAIC [Joint Artificial Intelligence Center] and are moving forward.

The RDT&E budget, I understand, is \$9 billion more than last year—is that right?—but most of that increase is actually not in the base budget, it is in the base OCO budget. Is that true as well?

Mr. Norquist, do you know that?

Mr. NORQUIST. No, I don't believe that it is predominantly in the OCO budget. The things that generally moved are like weapons

systems sustainment. I think the R&D—well, it is a spread account. I think—

Mr. LARSEN. Well, I think you are going to have to take a look—the increase, I think—go back and take a look at that, that it is in the base OCO as opposed to the base.

So I am wondering, if these things are priorities, how you make a choice between putting them in the actual base budget versus this fake base that is in the OCO.

Mr. NORQUIST. I would not assign any higher or lower priority to something in the base versus the OCO for base. We did it in a way—

Mr. LARSEN. Well, I would, because I have been here since the early 2000s and this is exactly the problem with OCO. It started off as the global war on terrorism, and we could actually define some things that were specific to GWOT. And what is happening now is exactly what we thought would happen, using the OCO budget for something that it is not supposed to be used for, things that are supposed to be in the base.

So I guess I would disagree with you, although we sit in different spots in making these decisions. And now we are stuck with a budget that is not really based on a base. It is based on shoving things in an OCO budget because it is available, not because you are supposed to be doing it.

Mr. NORQUIST. So we built it according, as was mentioned earlier, to the direction we were given. What we did to try and make it easier for the staff that we work with is to separate in the way the budget is submitted those things that we would think of as traditional OCO—direct war costs, enduring costs. And those are in the budgets listed separately from the OCO—

Mr. LARSEN. That is an OCO budget. That is what it is for.

Mr. NORQUIST. Understood.

Mr. LARSEN. It doesn't seem like it.

Thank you.

The CHAIRMAN. Thank you, Mr. Larsen.

Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman.

Gentlemen, thank you for your continued emphasis on auditing the books and records at the Department of Defense. It is a stunningly difficult task. And I know that the men and women who are actually trying to do that day in and day out must feel like Sisyphus each day, but it really is important. Good progress being made this past year.

Please express to all of them my thanks, officially. I know I have spoken to some of you about it to continue to do that, but this is really important work for the men and women in uniform and the civilians who are trying to get this work done.

Thank you for continuing to budget the requisite resources necessary in a period where budgeting is really difficult. So I thank you for that.

Mr. Norquist, thank you for your attention to the notices of findings and recommendations, actually assigning specific people to those tasks and then holding them accountable for getting that done. That will pay dividends moving forward. So no real comment

from you necessary, other than thank you for keeping up the good work, and we will finally get that done.

The Army end strength was dropped, 480,000, down from 487,500. Is that a reflection of the needs of the Army, or was that a reflection the Army's inability to recruit to that higher number? And if that is the case, can you talk to us about the drivers for why the Army can't meet its end strength from fiscal 2019?

Secretary SHANAHAN. I will speak to the total number, the recruiting challenge, and what the Army is doing to address that.

So it really is a shortfall in recruiting. The Army has now gone forth and—what David described earlier was, we did reset the top line to adjust for lowering the total end strength because we failed to recruit what we had projected.

The Army has doubled down on changing where they are recruiting, how they are recruiting, so that they can start to recover growth in the end strength. It is several thousand in this budget.

Chairman, I don't know if you have any comments on the specific recruiting and retention, but what we have seen is—

Mr. CONAWAY. Are there drivers in the population they are trying to recruit from? Is it the economy? What is causing the shortfall?

Secretary SHANAHAN. Yeah, the fundamental shortfall, it is a very competitive economy. I mean, we are all in this worldwide competition for talent. So, you know, fundamentally, it is a very competitive market. It is a good side of a strong economy.

General DUNFORD. Congressman, I would add just one point. Only about 29 percent of the demographic from which we draw are physically, mentally, and psychologically capable of service. To put a finer point on it, just slightly over a quarter of the population from which we typically recruit are actually eligible for military service.

That combined with the current environment we find ourselves now, a pretty competitive economic environment—it is always tough recruiting. It is particularly tough right now.

And I think the Army's challenges are kind of a bellwether for the future without some adjustments. And I know all the service chiefs are looking very carefully at recruiting and retaining high-quality people as being a core mission for us.

Secretary SHANAHAN. Of the 7,700 increase in end strength in this year's budget, 2,000 of those are Army.

Mr. CONAWAY. Well, from where they wound up, yeah, I understand. But it is down from where the fiscal 2019 number was.

Secretary SHANAHAN. Right.

Mr. CONAWAY. Well, General Dunford, I know that it is not your job or the Department of Defense's job to look at why we have so few men and women who are physically and mentally capable of doing that, but I think our society does need to address that issue.

And, then, appropriate attention being given to the impact the Army has on being short from what they would normally be if they had to stick with the, you know, the 487,500 that was authorized in 2019, the impact on the Army's ability to do what they need to do, I assume somebody is looking at that.

The conversation about OCO. The budget cap is law, and that is what you are required to go to. Is that distracting, to have that ar-

tificial, unrealistic number in law that has no basis in any kind of buildup of where we ought to be hanging over your head? Is that the real driver for trying to adjust the OCO number to fit what the military needs of \$750 billion?

Secretary SHANAHAN. It hampers the way we budget. So if you look at how we budgeted last year and how we built the budget up this year, the underlying process is exactly the same, the strategy is exactly the same, how we put it together is exactly the same. How we presented it to you is different.

Mr. CONAWAY. All right.

Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Mr. Cooper.

Mr. COOPER. Thank you, Mr. Chairman. And thanks to each of the distinguished witnesses here today.

Acting Secretary of Defense Shanahan, I would like to focus on you and on the space capabilities that we are anticipating having, whether you call that a force or a corps.

First of all, I am assuming that the President's budget proposal is not written in stone. We are a coequal branch of government, and we, of course, have the right to change that, right?

Secretary SHANAHAN. You do.

Mr. COOPER. So if there are certain poison pills in that proposal, we have the right to remove those poison pills, right?

Secretary SHANAHAN. I am not aware of any poison pills.

Mr. COOPER. Well, things we might view as poison pills.

Secretary SHANAHAN. Okay.

Mr. COOPER. Mr. Secretary, I know that you are very familiar with the committee's prior work on a space corps and the fact that this committee had, at one point, a 60-to-1 vote in favor of a corps.

Secretary SHANAHAN. Uh-huh.

Mr. COOPER. So I heard your answer in response to my friend Mr. Rogers that the most important part of your proposal is the Space Command, that that is what we need to kind of lead the charge toward enhancing our space capabilities.

Secretary SHANAHAN. Yeah.

Mr. COOPER. Is that correct?

Secretary SHANAHAN. Well, I answered the question, of the three pieces, which is the most important. I assume we are going to do all of it.

Mr. COOPER. Uh-huh. Well, I would like to do all of it too, but we have to make sure we can navigate it through Congress.

Secretary SHANAHAN. Right.

Mr. COOPER. I am not asking you to judge this. I am going to give you my appraisal.

It seems like that the proposal we received on our space capabilities is actually much closer to what this committee passed 2 years ago than it is to what had been mentioned in other press conferences.

For example, when the Secretary of the Air Force gave a budget estimate of \$13 billion to stand up a space capability, this proposal is \$2 billion, which is much closer to Mr. Rogers' and my proposal, which was essentially to spend as little money as possible just to reorganize the Air Force.

Secretary SHANAHAN. Uh-huh.

Mr. COOPER. So that is my judgment, not yours.

Secretary SHANAHAN. Uh-huh.

Mr. COOPER. Another key judgment is this: We never called for a separate military department. We wanted it to be underneath the Air Force. And that, in fact, is what is in the latest proposal from the Pentagon. Some people make the Marine Corps analogy. That is why we called it a corps as opposed to a force. It is easier for people to understand, like the Marine Corps.

Secretary SHANAHAN. Right.

Mr. COOPER. Another key element is that we had already passed into law the fact that the new Space Command would be a subunified command, and now that you all are asking that it be upgraded to a full command. That shouldn't be a problem, it would seem to me.

Secretary SHANAHAN. Right.

Mr. COOPER. But in these various ways, both the keeping it under the Air Force, not spending much money, and in having a Space Command, we are pretty much in sync on these priorities, right?

Secretary SHANAHAN. We are, very much so.

Mr. COOPER. Well, I hope that we can work constructively together to smooth out any rough edges in the proposal and to keep things on track not only to pass this House but also pass the Senate. Because I certainly feel a lot of urgency in enhancing our space capabilities. And even in your 5-year transition approach, that is 5 years that we may or may not have vis-a-vis certain near-peer adversaries.

Secretary SHANAHAN. Right. I fundamentally think we can go faster. And I appreciate your leadership, and Representative Turner was a catalyst to move more quickly.

I think, to your earlier point, the basic elements are in place. I think the chairman would say we have too much bureaucracy and too much cost. In the areas where we should be taking cost out, I am feeling aligned.

The capabilities we have really allow for growth. And if we had more time to go into how we have put together the proposal, technically we are aligned with the intelligence community, so down the road that integration can take place.

We also are provisioned if we wanted to set up a separate department sometime long term. But the kernels to get this started are very sound, and I think we have a really good, strong proposal.

Mr. COOPER. I see my time is about to expire. I thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Mr. Wittman.

Mr. WITTMAN. Thank you, Mr. Chairman.

Gentlemen, thanks so much for joining us today, and I appreciate your service.

Acting Secretary Shanahan, I want to talk to you specifically about aircraft carriers. As you know, the President's plan has us retiring CVN 75, the USS *Harry S. Truman*, without going through the complex refueling. The Navy says that they need 12 carriers. Naval warfare doctrine says 12 carriers to generate on station continuously and to surge.

The question is, has there been some change in naval warfare doctrine that says that now going to nine, where we won't get back up above that until 2027? Is there a change in that doctrine? And can we generate carrier presence continuously and surge capacity with only nine?

Second question is, last Thursday you told Senator Inhofe that the retirement of the USS *Truman* was offset by the two-carrier block buy. We understand that the early retirement saves \$3.4 billion. And while this might be true, you are losing 25 years of tested and capable presence with that aircraft carrier by retiring it early. And we have invested a lot of money in that carrier.

Secretary SHANAHAN. Right.

Mr. WITTMAN. You have also already spent \$500 million in purchasing reactor cores to refuel that carrier. Reactor cores don't work in other submarines. They only work in carriers, and they are designed specifically for the carrier at hand.

So the question is, does it make sense to retire this carrier early? And is the \$3.4 billion in savings worth the 25 years of loss of presence that we will have by retiring this carrier early?

Secretary SHANAHAN. So my answer to your question there is, I think it is a strategic choice we need to make. And this was a difficult choice. We spent a year making this decision. And under no certain terms, aircraft carriers are vital now and vital into the future.

The *Truman* decision was made in concert with the two-carrier buy. We looked at how to increase lethality. There isn't a draw-down of capacity until mid-2020, so it is not like this is an irreversible decision, but we took the savings to invest in the future force. And all of this was very mindful of the industrial base. So the other consideration here was, how do we invest in the supply chain, and there is actually growth in employment.

We can change these decisions, but I think as the Navy updates its 355-ship strategy and looks at its force structure, I think we may—back to your original point around doctrine, let's see what they come back with.

Mr. WITTMAN. The question still is, does nine allow us to generate continuously on station and in surge?

Secretary SHANAHAN. Yeah.

Chairman, I am going to ask you to answer that.

General DUNFORD. Congressman, it would be difficult to do that.

Mr. WITTMAN. Let me follow up on that, Chairman Dunford. You know, every combatant commander that I talk to indicates that they are not sufficiently supported by the Navy based on their plans. And, listen, I understand their plans always request a lot and that we are able to give a finite amount.

But I know that, in carrier force structure, when it comes to being able to project power, that is the framework and the strength of our ability to project forces around the world and to project presence around the world.

I wanted to know, in your professional judgment, what would the net operational impact for the Navy be of deactivating CVN 75 and a carrier air wing by fiscal year 2024?

General DUNFORD. Congressman, an important assumption that if it doesn't obtain we will come back to that reversibility-of-the-de-

cision issue—an important assumption is that the money that was saved by not refueling the *Truman* would be used to develop new ways of conducting maritime strike. So when we look at the carrier, we are looking at it from a maritime strike capability. And a more diverse way of providing maritime strike is among the initiatives inside the Department.

So, from a force management perspective and a joint warfighting perspective, if the path of capability development for a new way of delivering maritime strike in conjunction with the carriers that we have in place today and will have in place in the future, if that assumption doesn't obtain, then we will have to go back to the Secretary and have a conversation about reversibility of the decision. Because new programs combined with the programs of record today won't meet our aggregate maritime strike capability by the mid-2020s.

Mr. WITTMAN. And, listen, I am all for those unmanned systems, but it is a big leap, where we are only with *Sea Hunter* in its initial trials, to say we are going to completely replace a carrier that has that presence without having a bridge to those unmanned systems.

The CHAIRMAN. The gentleman's time has expired.

Mr. WITTMAN. Thank you.

The CHAIRMAN. Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman. And, again, thank you to the witnesses.

And particularly, General Dunford, you have been a rock-solid leader straddling two administrations and have really just done an outstanding job. And, again, thank you for your amazing service.

Mr. Chairman, you know, based on your conversations regarding the reprogramming decision yesterday, I would actually ask that the letter date-stamped March 25 from the Acting Secretary transferring a billion dollars out of the Army's account to the Department of Homeland Security be entered for the record.

The CHAIRMAN. Without objection, so ordered.

[The information referred to was not available at the time of printing.]

Mr. COURTNEY. Thank you. And I would just note that that transmittal actually pretty much almost exactly coincided with the submission to Congress of unfunded priorities from the Pentagon in terms of the, again, 2020 budget.

Mr. Norquist, could you tell us what is the total amount of unfunded priorities that came over from the Pentagon?

Mr. NORQUIST. I don't have the total yet from all of the services, sir.

Mr. COURTNEY. Okay. Well, I can help you with that. It actually was \$10.4 billion. And, actually, \$2.3 billion came from the Army.

So, you know, I would just say, you almost get whiplash around here trying to sort of follow the back-and-forth coming out of the Department. I mean, exactly at the same time that a reprogramming decision was made, again, without consultation from Congress—which, again, as far as I am concerned, is a Rubicon moment in terms of just the comedy between the two branches that has operated for decades—we are also hearing from the Army that they actually, by the way, need an additional \$2.3 billion for the 2020 budget for unfunded priorities.

And it just, again, really undermines the confidence in terms of just the messages that are coming over to us, you know, from the Department of Defense, which, again, are really now in a brave new world of basically treating the defense committees as non-existent in terms of reprogramming decisions.

So, again, just to follow up on Mr. Wittman's questions for a moment, General Dunford, Admiral Richardson and the Navy are actually working on an updated force structure assessment [FSA] for the shipbuilding plan, isn't that correct?

General DUNFORD. It is correct, Congressman.

Mr. COURTNEY. Do you know what is going to be in that FSA regarding the carrier fleet?

General DUNFORD. I don't know what is going to be in the FSA.

Mr. COURTNEY. And as much as we are trying on Seapower to find out the answer to those kinds of questions, we don't know either. And it just seems, to me, really premature for the Department to, again, come forward with a decommissioning or mothballing of the *Truman* when we still don't even really know what the revised force structure assessment looks like.

As my friend from Virginia pointed out, we have already got about \$500 million in sunk costs for the reactors, which, according to the Navy, are going to be, quote, "put on a shelf," which, again, is a shelf that we really can't reach up for for the new *Ford*-class program. It is a different kind of reactor.

So the savings that you are projecting in the 2020 budget, it is \$17 million for this year. Is that correct?

Mr. NORQUIST. Yes, it is \$17 million.

Mr. COURTNEY. Okay. So we are dealing with a decision which is premature in terms of being out of sequence with the Navy's updated force structure assessment. We have \$500 million in sunk costs that are already out the door. And we are going to save \$17 million with this request in the 2020 budget. Again, that really doesn't add up to a very good business case in terms of, you know, the very tough decisions that we are going to have to make.

As the chairman points out, you know, the figure, the top-line number that came over is decoupled from a deal on the spending caps. I think it is a pretty safe bet that the top line for defense is going to come down when the two chambers actually do what should have been done over the last 3 months, which was to negotiate a sequestration agreement with the administration. They, as far as I am concerned, completely abdicated on what everybody realizes must happen if we are going to move forward with a budget.

And so we have difficult budget choices to make ahead. And, you know, being left with a business case that just, again, doesn't help us with getting to that point is just going to be a very tough sell, let's just say, over at the Seapower committee.

I don't know how the clock is doing here, but——

The CHAIRMAN. You have about 30 seconds left.

Mr. COURTNEY. Okay.

The CHAIRMAN. And there is one clock over here that is working. They all shut down here.

Mr. COURTNEY. Okay.

Mr. Shanahan, again, just real quick for the record, your budget endorses planned procurement of three *Virginia*-class submarines in this year's budget. Is that correct?

Secretary SHANAHAN. That is correct.

Mr. COURTNEY. Yep. Thank you. I yield back.

The CHAIRMAN. Thank you.

We will endeavor to get—well, there we go. The clocks are working again.

Mrs. Hartzler.

Mrs. HARTZLER. Thank you very much.

Thank you, gentlemen, for your service and for your leadership for our national defense.

I appreciate the focus on strategic competitors in the National Defense Strategy and specifically China. I want to start off asking some questions about that, because, as we know, they have utilized economic, military, and political influence to extend their reach and shift the balance of power across the globe.

And Beijing's whole-of-government efforts are particularly apparent in areas like the Indo-Pacific, but they can be seen in places like South America, Europe, even the Arctic. So countering their influence and actions requires a whole-of-government strategy of our own.

And so my first question is, who is leading the U.S. whole-of-government response effort, and where does the Defense Department fit into this plan?

Secretary SHANAHAN. So I would say, fundamentally, I feel like the Department of Defense is leading significantly in the whole of government, but I have strong partnership with the Secretary of Commerce, Secretary of the Treasury, and Secretary of State. So we continuously discuss this subject, and we have activities that are coordinated between our departments. And I would have to say—and not overlook the Department of Justice as we work on critical infrastructure.

Mrs. HARTZLER. So are you saying, then, you are the main person in the lead?

Secretary SHANAHAN. I wouldn't say that, by definition, I have received some, you know, nomination to that role, but by virtue of having more resources and capability than a lot of those other departments, we have been an instigator, if you will, of collaboration and working across as a whole of government.

Mrs. HARTZLER. Do you get together regularly with your counterparts and sit down and discuss this, okay, State Department, why don't you do this, Treasury Department, let's do this?

Secretary SHANAHAN. Weekly.

Mrs. HARTZLER. Weekly.

Secretary SHANAHAN. Weekly.

Mrs. HARTZLER. Very good. Can you give some more detail about exactly what the Defense Department's response is to China in this part of the plan?

Secretary SHANAHAN. We will let the chairman start, and then I want to pick up on especially some of the economic, cyber.

Chairman.

General DUNFORD. Yeah, Congresswoman, I will just talk about posture, military posture, for example. And I think as you know,

we have about two-thirds of the United States Air Force, two-thirds of the Navy, a significant part of the Army and the Marine Corps that are in the Pacific. We have also fielded our most modern capabilities in the Pacific—the P-8, the F-35, the LCS [littoral combat ship], and so forth.

But the real important piece, I think, the most important military dimension of our strategy out there is developing a stronger network of allies and partners. And I think our presence in the region, the deterrence that we bring, our ability and our physical manifestation of our ability to meet our alliance commitments are all a really important part of our achieving a proper balance with China and the Pacific.

Mrs. HARTZLER. Very good.

And as I have had opportunity to travel in the Pacific area and visit recently with the ambassadors from Australia and New Zealand, I would just continue to say how important it is that we be very strategic and purposeful in those relationships, because China is being very purposeful and very aggressive and very assertive in developing those relationships, and it is very key.

I want to shift to the fighter force, Secretary. And, in your written testimony, you have discussed the \$57 billion allocated to increase the procurement and the modernization of our fighter force. And you have noted that we need a balanced mix of fourth- and fifth-generation aircraft to effectively meet the entire spectrum of National Defense Strategy missions, and the Air Force needs to procure about 72 fighters each year.

So what is the appropriate balance between fourth- and fifth-generation aircraft? And why do we need to address both in the requirements of the National Defense Strategy?

Secretary SHANAHAN. Yes. Thank you for that question.

You know, my role is to make sure that we are developing responses and a force structure to the right campaigns. That is why our focus on Russia and China is so important.

Each year, we go through a new evaluation of what the tactical air mix should be—fourth gen, fifth generation. And of that mix, there are three parties that really provide an input. Probably the most significant input comes from the Joint Staff as they conduct a mission analysis for, particularly, China and Russia.

And I would ask the chairman to walk us through how they go about making that recommendation.

General DUNFORD. Congresswoman, what we did—today, just to talk about mix, so today we have 20 percent fifth generation, 80 percent fourth generation. That is what is in our inventory today. If you look at 2040, it will be 80 percent fifth generation, 20 percent fourth generation.

And so, along the way, we have to achieve the right balance based on capability. That is the ability to penetrate and the information capability represented by the F-35—

The CHAIRMAN. I am sorry. The gentlelady's time has expired, and I think we got the gist there.

Mr. Norcross.

Mrs. HARTZLER. Thank you.

Mr. NORCROSS. Thank you, Chairman.

And thank our witnesses for coming today, particularly, General Dunford, for your years of service.

But I will follow up where my ranking member just left off, between fourth and fifth generations. We have sat in these chairs for at least the last 4 years and almost exclusively heard fifth generation, fifth generation, fifth generation.

The Center for Strategic and Budgetary Assessments in a recently mandated study concluded the F-15X will not be able to survive a more contested battle space, i.e., particularly China and Russia. So we are trying to understand the request that we are hearing for the new F-15 versus what we have heard up to this date, that F-35, the fifth generation.

What has changed, General, in the last 9 to 12 months to reverse what we have heard for the last 4 years?

General DUNFORD. First, Congressman, with regard to the primary platform the Department needs being the F-35, nothing has changed.

We continue to do analysis in war-gaming, and in the most recent what we call competitive area of studies, we took a look at what would be the optimal mix of fourth- and fifth-generation aircraft—fifth generation uniquely able to penetrate, fourth generation providing some capacity. So we are balancing that capability/capacity piece.

It is more complicated than just the mix of aircraft with regard to the F-15. One of the issues is the F-15C is aging out. And so there was a cost variable in place. There was also a partner-with-other-nations piece in place with the decision to get the F-15.

But it is all in the context of the migration from that 20 percent fifth generation today, 80 percent fifth generation tomorrow, in a path of development along the way that allows us to have a right mix of aircraft to accomplish the mission within the top line that we have been given.

And I think what we have seen in our competitive area studies is that the combination of the fifth-generation capability with the capacity of the fourth generation was the right mix. That was agnostic of platforms. And that study was actually done before the Air Force made the specific F-15 decision, which added those additional variables when they decided on the F-15EX.

Mr. NORCROSS. So it is the generation of the fourth generation, the C model, which is deteriorating faster? That has happened in the last 9 to 12 months that changed the decision from the last 4 years?

General DUNFORD. That is right. When we knew that the C was going to age out earlier than we would have wanted it to age out, we had to come up with a replacement. And when we looked at all of those variables—capability of the platform, capacity of the force as a whole, cost over time, as well as impacts on the industrial base as it pertains to us and our partners—that is how that decision was made.

But I, again, would highlight that there were probably four or five interdependent variables that led to that specific material solution.

Mr. NORCROSS. So you bring up capacity, and our understanding is that the F-35 would have the capacity, as it has in this year,

to increase its volume this year and future years to make up for what you talked about, the——

General DUNFORD. Sure. Capacity is twofold, Congressman. Thanks. One is ability to carry ordnance, and that is the one you alluded to. The other issue of capacity is the numbers of platforms that we have and we are able to field at any given time. And so it is really the latter with regard to the F-15 that will be sustained, the capacity for aircraft will be sustained by the F-15 decision.

Mr. NORCROSS. How much of the operating cost of the F-35 factors into this? Because plane for plane, they are roughly the equivalent, at least in this year's model.

General DUNFORD. Yeah, I think if you could buy all F-35s, you might do that. This, again, was looking out over time at the resources that will be available. And there is not much difference in the procurement cost, but there is about a 50 percent difference in the operations and sustainment cost between the F-15 and the F-35. And the F-15 also has a pretty significant shelf life available as well.

So, again, it was the combination of the platforms that we made a decision on.

Mr. NORCROSS. Are we expecting those operational costs for the F-35 to decrease?

General DUNFORD. That has been a singular focus of the Secretary and the team over the last couple of years, working with Lockheed Martin. They absolutely have to decrease in order for us to have a balanced force in the future. And there has been some progress, but we believe more progress needs to be made in reducing the operation and sustainment costs of the F-35. There is no question about it.

Mr. NORCROSS. Well, we are going to have more discussion of these. And certainly the impact of Turkey and the missiles that they are looking to purchase is going to all factor into this. Thank you for your testimony.

I yield back.

The CHAIRMAN. Thank you.

Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

And, gentlemen, getting back to—I think it was Stephen Covey who said “keeping the main thing the main thing.” In just under 6 months past, Hurricane Michael hit the coast. Obviously, you have a tremendous amount of damage from that storm, as does my congressional district. Congress has yet to be able to pass a disaster bill for that region.

And in just over 6 months, Secretary Shanahan, you will be responsible for executing a Department of Defense at the sequester caps if there is not some type of agreement made. By my calculation, that is somewhere around 60 legislative days between now and then.

So my question is, if you had to execute a budget at the sequester caps, what would the impact of that be?

Secretary SHANAHAN. Well, then it would be very difficult to modernize, because we are not going to walk away from our operations. So, you know, essentially, the impact is to modernization.

I mean, in the most simple, generalized terms, I mean, if you had to trade for one thing. We are not going to, you know, drop our commitment to operations, so we forgo our future. I mean, that is the big risk.

Mr. SCOTT. General Dunford, from an operational standpoint, what is the difference in us adopting an appropriation measure for you, say, September 1 instead of October 1?

General DUNFORD. To make sure I understand the question, Congressman, you are saying if we did not go into the fiscal year with a budget?

Mr. SCOTT. My question—yes, sir.

General DUNFORD. Oh, I see what you are saying. If we have the agreement in place.

Mr. SCOTT. If we can give you your budget 30 days prior to the beginning of the fiscal year so that you know what you have to execute with, what would happen with the efficiency of the operations at the Department?

General DUNFORD. You know, Congressman, I am glad you asked the question. So, going back to my days as the Assistant Commandant, I have been in and out of this now for more than a decade dealing with this issue. And I would tell you that, for us, collectively, one of the most inefficient things we do is have late budgets. It doesn't allow for the proper planning and being good stewards of the government's resources.

So, in order for us to really deliver capability and, at the end of the day, campaign outcome within the top line we have been given, it requires us to prioritize and allocate resources very deliberately. And budget instability and unpredictability don't allow us to do that optimally. And it wastes the government—it wastes taxpayer dollars.

Mr. SCOTT. I am concerned about what it does to morale, as well, for the families and men and women that are actually in combat. It gives the impression that we in Congress do not care.

So I would just hope that over the next couple of weeks that we are able to come to some type of a caps agreement between the House, the Senate, and the Presidency—obviously, it requires a bipartisan agreement—so that we are able to build a National Defense Authorization Act to whatever the agreement is and get the appropriation measures done sooner rather than later.

I have one specific question for Secretary Shanahan.

Army end strength, the request is 7,500 lower than the fiscal year 2019 authorization, but the funding request is increased by almost \$1.3 billion. Can you explain this difference?

Secretary SHANAHAN. I believe the fundamental difference is the 3.1 percent pay raise.

Mr. SCOTT. Did the Department request the pay raise at that level, the 3.1 percent?

Secretary SHANAHAN. Yes, we did. Yes, we did.

Mr. SCOTT. You did request that at that level. Okay.

Gentlemen, thank you for your service. I hope that over the next couple of weeks we are able to get to some type of agreement so that we are able to get an appropriation measure passed for you prior to the beginning of the fiscal year.

Secretary SHANAHAN. Great. Thank you.

Mr. SCOTT. With that, I yield the remainder of my time.

The CHAIRMAN. Thank you.

Mr. Gallego.

Mr. GALLEGO. Thank you, Mr. Chairman.

Acting Secretary Shanahan, a number of officials have appeared before this committee and have said the decision on reprimands and awards related to the Niger raid debacle rests with you.

When Secretary Mattis resigned late last year, we understood that he was furious at the initial recommendation to place blame on junior officers, allowing more senior officers to escape responsibility.

When will you make a decision about these reprimands and awards?

Secretary SHANAHAN. Congressman, when I came into this role—

Mr. GALLEGO. Just answer the question. When will you make the decision? That is a simple—

Secretary SHANAHAN. Soon.

Mr. GALLEGO. What is “soon”?

Secretary SHANAHAN. I have—

Mr. GALLEGO. What is “soon”? What do you define as “soon”?

Secretary SHANAHAN. I was going to explain.

Mr. GALLEGO. Okay. Go ahead.

Secretary SHANAHAN. Okay. When I came into this role, the recommendation was brought to me that Secretary Mattis had—he had convened a review, and that recommendation was brought to me. I did not find that sufficient, so I have convened my own review so I can ensure, from top to bottom, there is the appropriate accountability.

I do not know when that will be complete, but I have to assume that much of the work that has been done to date can be used. So by saying “soon,” I am not trying to mislead you—

Mr. GALLEGO. Okay. So just to be clear, you will be issuing a report. I want to—or you will be issuing it out. And part of that is, we are going to assure that it is not just going to be placing blame on junior officers. Because what it seems to me is that we are going to place blame on junior officers, and we are letting colonels and general officers just get off the hook—

Secretary SHANAHAN. Right.

Mr. GALLEGO [continuing]. For this debacle.

Secretary SHANAHAN. Right.

Mr. GALLEGO. I hope that is going to be part of this.

Secretary SHANAHAN. That is the reason—the fundamental reason that I have done this is for every person between the boots on the ground to the most senior position I want a direct accounting.

Mr. GALLEGO. Okay. And just to kind of put a more fine point to this, last year, the NDAA required a report containing a list of all recommendations implemented following the raid. It hasn’t been done. It is overdue.

When will I receive that? When will this committee receive that?

Secretary SHANAHAN. I will take that for the record.

[The information referred to was not available at the time of printing.]

Mr. GALLEG0. Okay. And just, you know, more for the record, because it does concern me that if I don't ask these questions we don't get any answers. You know, we consistently have this problem where I am asking about Niger, what happened there, what should be the lessons we learn from it. This committee has not used subpoena power in quite some time, but if this continues to be the case, that we are having to go back and forth, that I have to keep asking you for the information, I will be pushing for that.

These families, the American public deserve to know exactly what happened. And the junior officers that are being reprimanded right now should know that there is going to be equal reprimands especially for general officers, should they have done anything wrong.

Moving on, last night, the committee received a copy of your letter to DHS Secretary Nielsen approving support of up to \$1 billion in projects at Yuma and El Paso. In your letter, you say the DHS request meets the statutory requirements of 10 U.S.C. 284, noting DHS has identified each project area as a drug smuggling corridor.

Okay, question: Did you just take DHS at its words that these areas met such criteria, or did you actually do research or your staff do research to actually meet that criteria?

Secretary SHANAHAN. We did research, but, in addition, after the national emergency was declared, Chairman Dunford and I went down to El Paso and walked the areas where the 284 money will be applied and spoke with CBP [Customs and Border Patrol] personnel like Aaron Hull, who is the sector chief—I think that is Sector 9.

Mr. GALLEG0. Great. And what kind of information or documentation did they provide for you to support this conclusion?

Secretary SHANAHAN. David, do you want to answer that?

Yeah, we will have to—

Mr. GALLEG0. Okay. No problem.

Secretary SHANAHAN. Yeah.

Mr. GALLEG0. Did you or the DOD do any analysis or verification of this information?

Secretary SHANAHAN. Chairman.

General DUNFORD. Congressman, we went physically—just to make sure we are not talking past each other, we went physically to the areas where the infrastructure is proposed to see the need—

Mr. GALLEG0. Well, General, I am glad that you went and physically saw it, but, you know, there also needs to be other conclusive study that you could do besides just physically seeing. I am from a border State. I go to the border all the time. But there should actually be other information that is gathered.

General DUNFORD. Well, there is. There is.

Mr. GALLEG0. Okay. So that was—you used that to make this determination.

General DUNFORD. We went down—we had the information from Department of Homeland Security on the challenges they face in the specific areas wherein those challenges occur.

Mr. GALLEG0. Great.

General DUNFORD. And then the infrastructure is tailored to the specific geographic area and the threat that exists within that geographic area.

We had that information before we went down to physically see what we had read about before we went down to the border.

Mr. GALLEG0. Great. I really appreciate that we have that information—that you have that information. And, also, I would like for you to share that information and all the analysis and all the detail with this committee so we could see where the basis of this argument came from.

With that, I yield back my time.

The CHAIRMAN. Thank you.

Mr. Byrne.

Mr. BYRNE. Thank you, Mr. Chairman.

General Dunford, let me just join with the other people who have said that we are very grateful to you for your service to your country. And I want to thank you particularly for your service as chairman. You have been a great partner with those of us on the committee, and I deeply appreciate what you have done in conjunction with us.

I would like to go back to your colloquy with Mr. Thornberry to clarify one point. You mentioned the detailed analysis behind your assessment of the 3 to 5 percent real growth requirement and that this budget represents 2.9 percent growth.

Now, as to 3 to 5 percent, is that the minimum amount the force needs to accomplish the missions we ask of them?

Secretary SHANAHAN. It is. It is, Congressman. When we say 3 to 5 percent, that is to maintain the current competitive advantage—again, the margin has eroded over time—slightly increase our competitive advantage over time.

Obviously, more resources would result in a more decisive competitive advantage, but we actually identified that as the minimum necessary to make sure we could do what must be done by 2025.

Mr. BYRNE. The reason I wanted that clarification is, when we get into budget discussions, a lot of times, we start talking about wants and needs. And we are just trying to make sure, when we tell our colleagues that this is a need, that this is not a want. You are telling us this is the minimum.

General DUNFORD. Congressman, I am.

And, again, I think it is important for the members of the committee to know when we say “competitive advantage” what we mean. So I am talking about our ability to project power in the context of the threat posed by either Russia or China in Europe or the Pacific, as the case may be. And I am also talking about our ability to do what must be done on land, air, sea, space, and cyberspace.

So when we looked at the aggregate capabilities of both Russia and China and we looked at the capabilities we needed to develop over time, we based the figure not on math, we based the figure on the capabilities we needed in the projection of what investment would be necessary in order for us to field those capabilities.

Mr. BYRNE. All right. Thank you for that clarification.

Mr. Secretary, I wanted to thank you for all the support you have given to the space-based aspects of missile defense. That is vitally important not only to ballistic missile defense but also to

hypersonic defense, which all of us are becoming more concerned about.

I am confused, though, by the fact that Congress added more money last year for the space sensor layer to help MDA [Missile Defense Agency] meet their hypersonic defense requirements, yet the proposed budget zeroes that out.

Apparently, part of the space sensor layer will be housed in the new Space Development Agency that was established 3 weeks ago, but it doesn't have a dedicated funding line for this project. That seems to run counter to congressional intent but, more importantly, displays a lack of priority to a program that most of us feel we desperately need to be able to defend against Russian and Chinese hypersonics.

Maybe I have misunderstood this, so if you would please explain the reasoning behind the budget request.

Secretary SHANAHAN. I will have to go back and look at where the funding line is, but Dr. Griffin and I have made funding of the space layer for tracking of hypersonics a priority.

So, David, I don't know if you know where that funding—

Mr. BYRNE. Yeah, if Mr. Norquist can answer, that would be helpful.

Mr. NORQUIST. Well, to answer at the level you need, we will take that for the record.

But there are things related to missile defense that are, as you point out, are now going to be part of the Space Development Agency. The one you are talking about is one of them. It may not be broken out in a way that makes it as clear, so let's take that for the record and make sure we get you a complete answer, sir.

Mr. BYRNE. If you would, please. And once you make a determination about that, would you let the committee know?

Mr. NORQUIST. Yes, sir.

[The information referred to was not available at the time of printing.]

Mr. BYRNE. That would be very helpful. Thank you.

Mr. Secretary, the mission of the Space Development Agency [SDA] is to collaborate with the joint warfighter to define the next-generation space architecture, foster growth in the space industrial base, and leverage commercial allied space technology.

I support all those priorities, but they seem like acquisition authorities. Why is housing SDA under research and engineering the right place?

Secretary SHANAHAN. It is a temporary home. So, as the Space Force proposal evolves—you know, part of that was to get leadership of Dr. Griffin engaged. Dr. Griffin has a significant track record in space, and—

Mr. BYRNE. I am a big supporter of Dr. Griffin.

Secretary SHANAHAN. Right. Right.

Mr. BYRNE. He is superb for that position.

Secretary SHANAHAN. Right. Right.

So, you know, a couple things. Not only does he have significant experience in space, but his work initially with SDIO [Strategic Defense Initiative Organization] in how the Missile Defense Agency was stood up so they had the right acquisition authorities and the ability to do development—this is not about doing acquisition. This

is really about development. So think of him as overseeing the creation of the right structure.

This is really about the balance of putting appropriate authorities in place. If we get the wrong mix, it is just going to slow us down. So we are really relying on his experience and judgment to help us put the right pieces in place. That is how I look at it.

Mr. BYRNE. Thank you.

I yield back.

The CHAIRMAN. Thank you.

Mr. Moulton.

Mr. MOULTON. Thank you, Mr. Chairman.

It is getting to be a familiar tune, but I want to thank all of you for your service and especially Chairman Dunford. I am honored to have you there, as a fellow Marine, and we are very lucky as a country that you continue to serve. And I, too, share the hope, a bipartisan hope, on this committee that you would find some way to continue that service past your due time.

Mr. Acting Secretary, I would like to start with you. China and Russia have made major advancements in their conventional capability since the Cold War and significant investments in emerging technologies like hypersonics, AI, and cyber. It is one of the things I really like about your budget, that you are investing in these things as well.

Where do we have the strongest advantage against our competitors right now?

Secretary SHANAHAN. I think probably at the most basic level I would say undersea.

Mr. MOULTON. And so what are we doing to ensure we maintain that advantage?

Secretary SHANAHAN. Well, we continue to invest. You know, a lot of the things that are very unique and special we won't be able to talk about in here, but we are investing in very significant capabilities.

I think where, you know, I would go with the critical capabilities that we need to make in terms of really leveraging—you know, the chairman talks about our competitive advantage. Space, cyber, and missiles are where we can enable a significant gain, not just in terms of capability but deterrence.

Mr. MOULTON. Right. So I take your point, Mr. Acting Secretary, which is that it is really these traditional places like undersea capabilities where we have our advantage today, and that is why we need to make these new investments.

So, as we think about making these new investments in things like cyber and AI and hypersonics, what new arms control regimes that incorporate these emerging technologies could be in our strategic interest moving forward?

Secretary SHANAHAN. Yeah. This is where we need to do, in my view, the most significant work. You know, we will address the INF [Intermediate-Range Nuclear Forces Treaty] and New START [Strategic Arms Reduction Treaty], but things like New START don't contemplate artificial intelligence or these new weapons like hypersonics that have been created.

Mr. MOULTON. So you think it is critical that we incorporate these types of weapons systems into new arms control agreements.

Secretary SHANAHAN. We need to really think, what does machine-on-machine mean, as we take humans out of the loop? And these are arms control agreements that we need to have with people that we don't have arms control agreements with.

Mr. MOULTON. Right. Right. There is also a lot of debate on this committee about the nuclear modernization. How much money could we save in nuclear modernization if we were able to negotiate a bilateral reduction in ICBMs [intercontinental ballistic missiles] with Russia?

Secretary SHANAHAN. I don't know where to start in terms of calculating that.

Mr. MOULTON. Would it be significant?

Secretary SHANAHAN. I mean, if all nuclear weapons went away in the world, would there—

Mr. MOULTON. Well, not all, but if we were able to negotiate a reduction.

Secretary SHANAHAN. It always depends on which, right? I mean, the basic answer is, if you don't have to develop something, you save money. I mean, arms control agreements have value if you can avoid having to develop something you don't need.

Mr. MOULTON. Sure. Sure.

Mr. Chairman, I would like to also take this discussion to alliances, not just arms control but alliances that we have around the globe. I strongly believe—and I suspect you agree—in a strategy built on strong alliances and growing partnerships.

Despite massive investments in advanced weaponry, ships, and aircraft in the fiscal year 2020 proposal, what investments are we making to counter Chinese influence globally? And how is that reflected in the administration's budget request?

General DUNFORD. Congressman, I think you answered the question. And when you look at the European Defense Initiative, as an example, or you look at the exercise program, our foreign military sales assistance, and so forth, it is all designed to reinforce that network of allies and partners. And that is, as you have identified, in my view, the critical strategic advantage that we have over China, if we talk just China specifically, is our network of allies and partners.

Mr. MOULTON. So what are we doing—as China has their One Belt, One Road proposal that they are pursuing aggressively with significant investments, what are we doing to counter that growing influence in Asia, in Africa, in other places where they are making Marshall Plan-sized investments in potential allies?

Mr. Chairman, could you take that?

General DUNFORD. I can talk to the military dimension of it, Congressman, because I think what you are highlighting is a broader gap in our overall political and economic approach that is still being worked. There is a strategic approach, but we have a lot of work to do to keep pace with the One Belt, One Road in terms of a comprehensive political, economic, and security package.

In the security space, it is the work that we are doing with allies and partners. And I would argue that I certainly spend probably 60 percent of my time, without an exaggeration, doing that. And I think the Secretary is probably pretty close to half his time, as

well, in dealing with our allies and partners and building those relationships, building that interoperability.

And, certainly, you know, I have, I think, 22 liaison officers on my staff from other countries right now. And all of our exercise design and so forth is all now to incorporate coalition capabilities into our exercises.

So, from a military perspective, we are very mindful of the need to broaden and deepen these allies and partners, and everything that we do is actually informed by that.

Mr. MOULTON. I am out of time, but, Mr. Shanahan, if you could just take that question for the record as well.

[The information referred to was not available at the time of printing.]

The CHAIRMAN. I am sorry. The gentleman's time has expired, so if there are any other questions, they will have to be taken for the record.

We will go to Ms. Stefanik.

Ms. STEFANIK. Thank you, Mr. Chairman.

General Dunford, thank you for your tremendous leadership and service to our Nation. You will be sorely missed on this committee. It has been a privilege to work with you.

My question is for Secretary Shanahan. I wanted to follow up on Mr. Moulton.

With nearly a decade of China making significant investments in AI, quantum, and other emerging technologies, why is our top-line number so important to ensure that in the long term we are able to fight and win against near-peer adversaries like China?

Secretary SHANAHAN. Thank you for that question.

Modernization is the most important thing we can do to maintain deterrence, create military capability, but that is also what enables us economically. So they really all tie together.

And I think, going back to the Congressman's question, what I think you would find in the Department of Defense as we are doing great power competition is it is not just about conducting military exercises. How do we work with partners in the regions where we are providing security to unlock economic capability and develop economic relationships? The relationships we form through the Department really can unlock some of those other diplomatic or economic benefits.

So we are strictly—I mean, we are not looking at these great power competitions as the military is the solution. The military is an enabler to unlocking diplomatic and new relationships. But that top line in these critical areas, particularly cyber, are fundamental.

Ms. STEFANIK. Thank you.

My next question is on a different subject. For the past 5 years, there has been broad bipartisan and bicameral support for the designation of an east coast missile defense site, yet the Department has not made any such designation available to this committee.

The environmental impact study [EIS] has been completed, and the threat to our homeland from rogue nations' ICBMs continues to evolve. And the requirements for increasing the engagement envelope and allowing for a shoot-look-shoot CONOPS [concept of operations] is more imperative than ever.

Congressional intent in the last NDAA was that the site designation after the EIS would be released. So I expect the Department will indeed respect that congressional intent and share this designation with the committee. Can I count on that?

Secretary SHANAHAN. You can.

Ms. STEFANIK. And my last question—give me 1 second here.

So I also wanted to get you on record. Do you agree that any addition of a CONUS interceptor site must enhance current capabilities to protect the entire continental U.S. by expanding the battle space and projecting power on the east coast? The key question is——

Secretary SHANAHAN. Yeah.

Ms. STEFANIK [continuing]. Any third site must protect the entire continental U.S. Do you agree with that?

Secretary SHANAHAN. Let me take that one for the record.

Ms. STEFANIK. Okay. I believe that is incredibly important, that as we are——

Secretary SHANAHAN. Right. No.

Ms. STEFANIK [continuing]. Considering any potential location, that it should protect the entire continental U.S.

Secretary SHANAHAN. No, I understand. And my hesitancy is when you look at coverages and what threat we are protecting against. It is more a refinement of the answer that you are requesting.

You know, I would just make a plug for the success the Missile Defense Agency had yesterday in probably one of their more complex tests of the Ground-Based Midcourse Defense System, of which that would probably be an important baseline.

But I will get back to you with that answer.

[The information referred to was not available at the time of printing.]

Ms. STEFANIK. Okay. Thank you for that.

I yield back.

The CHAIRMAN. Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman.

We recently returned from a trip to Jordan, Iraq, Kyrgyzstan, and Kuwait.

In Jordan, we observed and looked at and talked with the Jordanians about a \$350 million investment that the Defense Threat Reduction Agency made to create a virtual 21st-century border wall along the 300-plus miles of the Jordanian-Syrian border to keep out drug smugglers, armament smugglers, as well as ISIS [Islamic State of Iraq and Syria]. By all accounts, the utilization of electronic surveillance equipment, command and control, and rapid-reaction capabilities proved to be extraordinarily effective.

Now, we are in the process of transferring some \$8 billion from the Department of Defense to build less than 300 miles of border wall. So my questions to you really are about the wall.

It is our understanding that last night the Department of Defense sent a notification of its intent to reprogram funds and use from 10 U.S.C. 284 to construct portions of a border wall. We also understand that the Department of Defense may start awarding contracts using funding pursuant to 10 U.S.C. 2808 as early as May.

Can you, therefore, explain in more detail the status of your plans to build a border wall pursuant to 2808? Specifically, have you made any determination that the supposed national emergency requires the use of Armed Forces, Mr. Secretary? If so, why?

Secretary SHANAHAN. So the status of 2808 is I have received a request from the Department of Homeland Security, and part of the process for me to make a determination is I have tasked the chairman to do an analysis of that request. He will come back to me and provide a military recommendation.

Chairman.

Mr. GARAMENDI. Okay. Have you made any determinations that a border wall is necessary to support the use of troops at the border?

Mr. Dunford—Chairman—or, excuse me, General.

General DUNFORD. Congressman, just to make sure I am answering the question directly, so we are responding to the President's direction to reinforce Department of Homeland Security because they have capability and capacity shortfalls. So, to that extent, we have responded to requests for assistance for U.S. military personnel. So we have determined that U.S. personnel can appropriately backfill the capability gaps and capacity/size gaps that Homeland Security has.

Mr. GARAMENDI. My question is somewhat different. It is have you made any determination that the border wall is necessary to support those troops?

General DUNFORD. Oh. No, that is exactly what the Secretary has tasked me to do now, Congressman, is to look at the legislation, which I did yesterday, and determine whether the projects that have been identified by Department of Homeland Security would be enhancing the Department of Defense's mission.

Mr. GARAMENDI. Next, have you or anyone else at the Department had any discussions or made any comments about needing to send or keep troops at the border in order to justify using section 2808 to build a border wall?

Secretary SHANAHAN. I certainly haven't, Congressman.

Mr. GARAMENDI. Very good. Next, what border wall projects will be built with section 2808 funds? I.e., where along the border will the wall be built with these funds? Are these sections of the border wall military installations? If so, why?

General DUNFORD. Congressman, we have—to tell you what we are in the process, so we have a list of projects identified by Department of Homeland Security, but the Secretary has not yet identified which of those aggregate projects that DHS has identified would be funded by 2808.

Mr. GARAMENDI. And I will go back to where I started this conversation. We observed 350 or 340 miles of virtual border wall that is successful between Jordan and Syria in what is, without doubt, one of the most dangerous places in the world successfully operating at a cost of \$340 million. Something for all of us to think about.

Finally, I would just observe that the United States Constitution is extraordinarily clear about who has the power of appropriation. It is not the President. And the President is usurping the power, and you are part of that usurping of power.

With that, I yield back.

The CHAIRMAN. Thank you.

Mr. Gallagher.

Mr. GALLAGHER. Thank you, Mr. Chairman. Secretary Shanahan, Chairman Dunford, thank you both for your testimony this afternoon.

Chairman Dunford, to the maximum extent you are able to in this setting—and I recognize there are limitations—can you explain the espionage threat posed by Huawei and ZTE on the transfer of U.S. data and voice communications over their networks?

General DUNFORD. I can, Congressman. If you think about the implications—are you talking in the future with 5G in particular?

Mr. GALLAGHER. Yeah.

General DUNFORD. So if you think about the implications of 5G, the Internet of Things, as well as the primary means that we will use to share information and intelligence with our allies and partners, one of critical aspects of 5G has to be assurance that it is a secure network. If not, we will have vulnerabilities in capabilities that we field in the future that will leverage 5G.

And probably as importantly, a foundational element of an alliance is the ability to share securely information and intelligence. And it will be much more difficult for us to have those kinds of assurances to facilitate exchange of information given the trends with China's influence.

Mr. GALLAGHER. So it would be fair, then, to say that there are military operational processes that you are worried about as you look forward to operating with partners and allies that may be using Huawei systems.

General DUNFORD. Congressman, yes. And this is a broad, fundamental national security issue, and there needs to be a fulsome debate on exactly where we are headed. I do believe that the vulnerabilities are acute.

Mr. GALLAGHER. And what steps has the DOD undertaken already or could you possibly undertake to mitigate these threats?

Secretary SHANAHAN. Maybe I will pick up on this. Maybe if I could just add to the chairman's comments, so if we look at 5G and then the environment that those systems are developed and where they come from, you are talking about a country that has a clear history of cyber espionage. We are talking about a country with predatory economics. We are talking about, you know, looking at—people having to have a social credit, that part of doing business over there is you have to share data.

With that as the backdrop and then not having the understanding of how you could trust the network, that is our concern with 5G, from a Department of Defense standpoint.

So in the absence of being able to verify that hardware or a provider is trustworthy, the things that we are going to have to do is have secure networks that keep that equipment off of that. But the real risk is we have to operate in environments where we don't know how secure that network is.

And this is where we get into discussions with our NATO [North Atlantic Treaty Organization] partners and other countries. As they pursue economic advantages of purchasing low-cost equipment, they are forgoing security. And that is, I think, our biggest.

Mr. GALLAGHER. Sure. And in light of those concerns, would you recommend that American technology companies sell critical enabling components to firms like Huawei and ZTE?

Secretary SHANAHAN. Well, I am always for America selling the right equipment. I think the real work we have to do here is, we were as a country the leaders with 4G. We should be the leaders with 5G. I mean, it is not only in our security interest but it is in our economic interest to be able to have that kind of capability.

Mr. GALLAGHER. And then, Chairman Dunford, you talked about sort of the concerns that we would have if we are working with allies, even close allies, that have technology from Huawei and ZTE. I think the Aussies, who are one of our closest allies—we celebrated 100 years of mateship last year—have been at the lead in sort of disallowing China from competing in Australia for 5G technology. My understanding is New Zealand may follow suit.

Talk to me about where the Five Eyes alliance is on this critical question. Because it is my theory that we should start there and then build outwards to our NATO allies.

General DUNFORD. Sure, Congressman. In fact, Sunday night at my home, I will have my Five Eyes counterparts, and we are talking about—I won't talk too much in detail here, but we have been having this conversation for the last 18 months to understand where we are as a group in terms of our ability to manage this challenge and many other challenges associated with our competitive advantage.

Mr. GALLAGHER. I appreciate that. And I know you guys are tracking on this issue, which I view to be, I mean, perhaps the most important one we face right now. So thank you for your attention to it, and thank you for being here today.

General DUNFORD. Absolutely. Thank you.

Mr. GALLAGHER. And I yield the balance of my time.

The CHAIRMAN. Mr. Carbajal.

Mr. CARBAJAL. Thank you, Mr. Chair.

Chairman Dunford, let me, too, add my thanks for your service. I think your exodus is going to be greatly—we are going to greatly miss you. And I do hope, as was said earlier, that we find some way to keep you engaged, as I think that will be important for our national security.

Acting Secretary Shanahan, military construction [MILCON] is defined in the law as any construction, development, conversion, or extension of any kind carried out with respect to a military installation necessary to produce a complete and usable facility.

I imagine it is pretty rigorous of a selective process and must prove to be important to the well-being and readiness of service members. As the law states, the purpose of these funds are to produce usable facilities for our military.

Correct me if I am wrong, but getting a project selected to receive MILCON funding is pretty difficult, and, in most situations, it takes years before installation commanders actually get MILCON projects funded and included in their budgets.

Diverting MILCON funding hampers the Department's and Congress' ability to sustain what you all have been stressing is readiness, and as the Commandant of the Marine Corps has alluded to.

Congress did its job by authorizing and appropriating funds from MILCON projects that the Department and Members of Congress saw as vital to the safety and readiness of our service members. And what we are being told is that this funding is not going to be used where the law clearly states it should be used.

Secretary Shanahan, you are asking this body to authorize \$3.6 billion to backfill projects we already authorized and appropriated. In addition, you are requesting another \$3.6 billion to build a wall.

How did the Department of Defense get into the business of funding a physical wall for what you all consider is a nonmilitary emergency?

That was a rhetorical question.

Moving on to Venezuela. Is the use of military assets to deliver humanitarian aid and services being used to send a signal to Russia and other foreign entities of this administration's intent to solve the crisis in Venezuela militarily, one?

And, two, does the DOD have any plans or intentions of sending additional support other than humanitarian aid supported by USAID [United States Agency for International Development]?

And, three, has the DOD been given any requirements for assistance to fulfill from other agencies?

Secretary SHANAHAN. So the use of the military for humanitarian assistance is vital. And I think one of the reasons that we were drawn in by the State Department was because we could do this so quickly.

To your question regarding, you know, other plans and activities as they relate to supporting Venezuela, the chairman and I have been in discussion for the last several weeks, you know, how do we put a more regional face on our humanitarian efforts.

I will be going down to Southern Command to meet with Admiral Faller to have further discussions around, what are the things that can we do to provide support to the people of Venezuela.

Chairman, do you have any comments?

General DUNFORD. The only thing I would say, Congressman, is that your first question about was it designed to signal, we got the request, and it was generated by USAID. It went to the State Department, and they asked us to meet a capacity shortfall. And as the Secretary said, it was our ability to deliver a large volume over a short period of time in support of USAID which drove that initial humanitarian assistance request.

Mr. CARBAJAL. Let me finish with the time I have left. Is it this administration's intent to use a military resolution on this issue—to achieve a military resolution?

Secretary SHANAHAN. That is not my understanding.

Mr. CARBAJAL. Thank you.

I yield back my time.

The CHAIRMAN. Okay. One, we have five people left to ask questions here who have not yet spoken. I am going to press on. There is the possibility that others are going to come back, and we will deal with that as it comes, but we will try to press on. I think we can conceivably get done in the next 45 minutes or so, so I will try and do that.

Mr. Waltz.

Mr. WALTZ. Thank you, Mr. Chairman.

Gentlemen, thank you for your service, and thank you for being here today.

I want to talk to you a moment about space. Russia and China have weaponized space. They have done so; they are in the process of doing so. And they explicitly, in their national security strategy, seek to dominate the United States in space. They are prepared for war, and, in my opinion, we are not.

So with the flip of a switch, China can track, they can dazzle, they can destroy our assets in space. In 2018, China conducted more space launches than any other country in the world.

Why does this matter? I think, as leaders, we need to help Americans understand that our entire modern way of life is dependent on space now—our navigation, our supply chain, our banking, how we communicate. Space Foundation says over \$400 billion of our economy is now dependent on space.

Yet, in the Pentagon, our various components for warfighting in that domain are all over the place. GAO [Government Accountability Office] estimated we have over 60 stakeholders involved in this organization in terms of acquisition, oversight, and the Air Force has 11 different parts.

I personally believe we are with space where we were in the 1940s with the Air Force, where it had to be split off from the Air Corps for all kinds of reasons that are now obvious.

I have introduced legislation that cleans up some past legislation in terms of making it a fully unified command versus the subordinate command. I would encourage my colleagues to support me in that.

Bottom line, gentlemen—and I will go with you, Mr. Secretary—are we prepared? Are you confident that we could win a conflict in space today if we had to do so?

Secretary SHANAHAN. I am fully confident we could win a conflict in space today.

Mr. WALTZ. Without the current budget trajectory, for example, if we had to go to a continuing resolution, are you confident that we could win in space in the next 5 to 10 years given Chinese investments?

Secretary SHANAHAN. We just don't need to take that risk. I mean, this is really about—we have a \$19 trillion economy that runs on space. That is why the CR would be so painful. We have put a plan in place. The 3 to 5 percent real growth that we need allows us to even go faster. But it is vital that we get that top line.

Mr. WALTZ. Mr. Secretary, have you made a decision on where the new U.S. Space Command will be located? There is reporting in the press that it will be in Colorado and that there has been a nomination.

Secretary SHANAHAN. Yeah, no, there is——

Mr. WALTZ. I would submit to you space is in Florida's DNA and to strongly——

Secretary SHANAHAN. Right.

Mr. WALTZ [continuing]. Consider Florida as you move forward with that decision.

Break, break. Separate topic, on counterterrorism, capacity-building, soft power. I would just submit to you—and I am concerned in hearing testimony across the board from across the services. I

understand where we are going with the National Defense Strategy. I think that is the right thing to do, in terms of reinvesting in our technological superiority. However, we cannot do what we did in the 1980s post-Vietnam and flush those lessons, those counterinsurgency, those counterterrorism lessons down the tubes.

General Dunford, do you believe ISIS is defeated as a military organization?

General DUNFORD. ISIS maintains global capability, Congressman. So while it had been cleared of the ground in Syria and Iraq, it remains a threat.

Mr. WALTZ. Do you believe that al-Qaida is defeated?

General DUNFORD. No, I don't, Congressman.

Mr. WALTZ. Do you believe that, in your military advice, that the Taliban—forget their political will—that they have the military capability to deny al-Qaida use of Afghanistan? And particularly military capability, that 300,000-man Afghan army and a coalition of the most powerful Western armies in the world have struggled to do in 18 years, and I have certainly participated in, and I know you have as well. Do you believe the Taliban have that capability if we bought into the fact that they desire to do so?

General DUNFORD. Congressman, I am not pushing back on your question, but it is hard for me to imagine having a conversation about the Taliban fighting al-Qaida given how close they are as organizations right now.

Mr. WALTZ. Right. I 100 percent agree. First, we have to get over do we buy they have the will to deny al-Qaida Afghanistan as a launching pad back into the United States. Then we have to look at what is their enforcement mechanism, what is their capability.

Gentlemen, just with the time I have remaining, I am glad that you touched on the fact that if we had to go to a national emergency today from a recruiting standpoint, 75 percent of young people couldn't serve in the military. That is why I am pushing for us to go back to national service—that is not a draft; that is national service—as a means to prepare our young people to serve in all types of capacities. And I look forward to working with you in that regard.

Thank you.

The CHAIRMAN. Thank you.

Mr. Crow.

Mr. CROW. Thank you, Mr. Chairman, and to all of you for your testimony today.

And I will reiterate my colleague's comments, General Dunford, on your lifetime of service. I thank you for your professionalism.

And with all due respect to my colleague from Florida, Colorado is a mile closer to space than Florida is and a great place for space assets.

Let me begin with General Dunford.

In my three combat tours in Iraq and Afghanistan doing counterterrorism/counterinsurgency operations, you know, it became abundantly clear to me that involvement of humanitarian and diplomatic efforts and resources were instrumental to our ability to get the job done and to secure our forces and our allies as well.

So, in that context, is it your professional judgment and in your experience that if the proposed cuts to the State Department would

occur, would that have a negative impact on our stability and support operations and our national security?

General DUNFORD. Congressman, first, with regard to the first part of your question, I couldn't agree with you more, and my experience is very similar to yours.

I am not familiar enough to know how Secretary Pompeo—how his budget is constructed and what the direct impact is of the cuts to the State Department to be able to judge whether that will have a direct impact on our operations.

Mr. CROW. Well, if we have fewer diplomats or fewer resources to supplement our forces and to provide capacity-building to our allies and our local partners, does that jeopardize our ability to perform our missions overseas?

General DUNFORD. That particular shortfall would. There is no question.

Mr. CROW. And also to you, General Dunford, I am particularly concerned about the long-term security of our Kurdish allies, particularly the Syrian Democratic Forces in Syria. Are you satisfied that, as of today, there are sufficient long-term plans in place to ensure the protection of the Kurds and our allies, in particular the SDF forces?

General DUNFORD. Thanks, Congressman. In Syria specifically, you know, we are seeking campaign continuity, and that campaign continuity includes the partnership with the SDF to complete the task against ISIS.

We are also working to assure Turkey that its security interests are addressed along the border.

And so, right now, our near-term plan with the President's decision for residual force includes continued train, advise, assist for our Kurdish partners on the ground as well as a framework that will prevent any challenges or threats then.

Mr. CROW. So it sounds like we are working on it but we are not there yet.

General DUNFORD. Congressman, I would tell you, if I come here 6 months from now, I will tell you we are still working on it. This is a journey, not a destination. I mean, we continue to make refinements to the plan. It is a very—as you know personally, it is a very complicated situation. And I think we make progress every day, but I suspect we will continue to work this for months to come, keeping in mind the thesis of your opening line, which was, at the end of the day, this is about a political solution, which is very much still in the works.

Mr. CROW. Well, I will just posit that I think our moral credibility as well as our security will be tied up with our ability to protect those forces and that population.

And, Acting Secretary Shanahan, you know, I am deeply concerned about mission creep and the use of the AUMF [Authorization for the Use of Military Force] over the last 18 years. And, obviously, Congress has authority to declare war and oversight authority of the Department of Defense and military operations.

It is my understanding that execute orders, or EXORDs, which outline operational authorities delegated by the Secretary to commanders or components, have previously have not been made accessible to committee staff. And we can't do our oversight role un-

less committee staff has that information. So will you commit to be able to provide those timely to committee staff?

Secretary SHANAHAN. Congressman, I have been working over the past 6 weeks to come up with a process so that we can share that information, and I am going to be prepared next month to come share that and work with the committee staff.

Mr. CROW. So next month is the goal?

Secretary SHANAHAN. Yes, that is the goal.

Mr. CROW. Okay. And why has the Department not fulfilled its obligation and submitted the congressionally mandated report on advise, assist, and accompany missions?

Secretary SHANAHAN. I will have to take that for the record.

[The information referred to was not available at the time of printing.]

Mr. CROW. And that is section 1212 of the fiscal year 2019 NDAA, just to be clear.

Secretary SHANAHAN. Good. Thank you.

Mr. CROW. Thank you.

I yield back, Mr. Chairman.

The CHAIRMAN. Thank you.

I see we do have some folks coming back. So we are going to go with Mr. Bergman, and then when he is done, we are going to take a 10- to 15-minute break, give the witnesses a chance to stretch and relax for a moment. And then we will reconvene at 12:45 and go from there.

With that, Mr. Bergman.

Mr. BERGMAN. Thank you, Mr. Chairman.

And, General Dunford, I know you have heard it from everyone, but thank you for being the embodiment of servant leadership. Thoughtful, pragmatic, mission-focused. You have set an example that we all can follow on a daily basis. Thanks.

Mr. Shanahan, the subject in advance here as I work through the question is PFAS [perfluorooctanesulfonic acid] contamination. In my district in Michigan—Alpena, Grayling, Marquette, Escanaba—we have areas of confirmed and potential PFAS contamination, some including BRAC'ed [base realignment and closure] bases which closed decades ago but also at State-owned National Guard facilities.

As you already know, the Army and the Air National Guard don't have access to the Department's environmental restoration funds the same way the Active Component bases do.

Given that the work of our National Guard—that what it does is directly related to overall readiness of our Armed Forces, I believe that the DOD does have a role to play in mitigating PFAS contamination. Do you agree, Secretary Shanahan, that we must find ways to address PFAS contamination not just at Active Duty bases but also at National Guard facilities?

Secretary SHANAHAN. Sir, I think that we need to address the issue of PFAS/PFOA [perfluorooctanoic acid] contamination writ large in all of our communities. This is a significant health and environmental risk.

Mr. BERGMAN. Can you give me any examples of how DOD is currently working with other agencies to address the issue?

Secretary SHANAHAN. I know the Department is working with the Environmental Protection Agency to harmonize some of the standards.

Our focus has been to substitute. So when you think about the fire retardant, how do we, you know, just eliminate the contamination so we no longer test, we no longer train, and we no longer do research with those chemicals.

Mr. BERGMAN. I understand. And is there anything—because Congress is a partner in this. Is this anything that you would suggest—and you can take this for the record if you would like—what Congress can do to further support DOD in ensuring that you have the ability to work with all of those other agencies to eliminate this problem?

Secretary SHANAHAN. No, I will take that for the record, but it is one of these—we truly need to get a harmonization of the environmental mitigation plans. I mean, we need to be able to address it. But I will take that for the record.

[The information referred to was not available at the time of printing.]

Mr. BERGMAN. Thank you.

General Dunford, you know, it is clear that the National Defense Strategy has influenced this budget, as it does with every budget. But what is less clear is how the joint force plans to operate differently.

Can you explain in an unclassified way some of the concepts that are being developed to operationalize the strategy, you know, update the OPLANs [operational plans], combining with budget?

General DUNFORD. Sure. Probably, since you talk about OPLANs, probably one of the more fundamental changes that we made is the shift from an OPLAN basis method of planning to campaign plans that incorporate the whole problem set.

So, in the past, we might have developed a plan for a specific contingency in a specific geographic area, a fairly narrow view of the threat. When we think about Russia, China, Iran, North Korea now, our planning is we develop global plans so that we talk about a specific contingency but we talk about it in the context of what the entire joint force will be doing globally at any given point in time.

I will just very quickly give you an example. So when we have done recently a readiness review for our preparedness for Korea, we not only looked at Korea, we looked at what we were doing across the region in the Pacific, what we were doing to defend the homeland, and what each of the combatant commanders would be doing outside of the theater either in direct support of that contingency or as that contingency goes on to mitigate the risk of opportunism and other risk.

Mr. BERGMAN. Thank you.

And I guess I am the only one standing between us and a break, so I yield back.

The CHAIRMAN. Okay.

We are going to take a brief recess in a moment. We will reconvene at—do you guys need 10, 15 minutes?

Ten. Okay. We will reconvene at 12:40. Mr. Brown is going to be in the chair. I have something I have to do, but I will be back. And

Mr. Brown is first up, so he is not really just putting himself in charge and then calling on himself; he actually is next.

So we are in recess for 10 minutes. Thank you.

[Recess.]

Mr. BROWN [presiding]. If we could all start to take our seats, and we will reconvene the second portion of this hearing of the House Armed Services Committee.

And I certainly appreciate the patience of the members, as well as the endurance of our witnesses. General Dunford, Mr. Shanahan, Mr. Norquist, thank you very much. And we will go ahead and pick up where we left off. As the chairman mentioned, I was next in order, so I will begin with my line of questions.

Let me just start by saying that I think—you know, I recognize that as, you know, members of the Armed Services Committee, our responsibility is to look at authorizations for underlying supporting the National Defense Strategy, and that the National Defense Strategy really implements one of the four pillars of the National Security Strategy. That is peace through strength with a focus on building a more lethal force.

As we as Members of Congress more broadly are looking at how do we ensure that we authorize and appropriate for the entire National Security Strategy, which includes defending the homeland, a lot of defense and nondefense spending that is in there, American prosperity, a lot of nondefense spending in there and projecting American values. In fact, if you look at the National Security Strategy, it talks about vocational training, it talks about diversifying the energy portfolio, it talks about a forward presence of a diplomatic corps, and our development activities throughout the world.

So let me turn, though, to the focus of this, you know, committee, the National Defense Strategy and the underlying budget. This year, the President's budget request is for \$750 billion, \$718 [billion] to the Pentagon, and which is the highest adjusted for inflation since the height of the Iraq war. An overseas contingency, it includes an OCO funding of \$174 billion, \$164 billion to the Pentagon, which is the absolute highest that we have seen since the height of the Iraq surge in 2007 and 2008. And this is occurring at the same time that the National Defense Strategy, it is talking about a pivot away from the counterterrorism fight, not abandoning that fight, but pivoting away as we focus more on great power competition with China and Russia.

I think it is important for Congress that, you know, we are open and transparent to the American public and that the Department of Defense is as well, so when we have appropriations categories and authorization accounts, that we can demonstrate to the American people that we are faithful to the original design and intent. So I just want to ask you about a few items, just to shine some light on what we are actually doing here, what is being requested in the President's budget request.

I am reading \$8 billion for ship depot-level maintenance has been moved from the Navy base budget to the OCO account. And to my knowledge, there is not a single dollar for depot-level maintenance in the base budget. Is that accurate?

Mr. NORQUIST. I believe that sounds correct.

Mr. BROWN. Okay. \$1.2 billion for Trident II nuclear missiles in the overseas contingency operation funds. Is that correct?

Mr. NORQUIST. It is. It would be in the OCO for base, correct.

Mr. BROWN. It is in the OCO, overseas contingency allowance, Trident missiles.

Five hundred thirty-three B61 low- to medium-yield nuclear bombs are in the OCO portion of the budget. Is that accurate?

Mr. NORQUIST. I don't know that one off the top of my head.

Mr. BROWN. Yeah, that is accurate. I will answer that one.

There is \$1 billion for the Patriot missile system in the OCO budget. The Patriot, as you know, is to defend against advanced enemy fighters. We are talking about in an overseas contingency operation fund. Does that sound accurate?

Mr. NORQUIST. That may be right. The Patriot is also used in terms of defensive facilities in bases against missiles.

Mr. BROWN. And then finally, I want to point out the European Deterrence Initiative [EDI], \$500 million remains in OCO budget. I understand that it has been done that way in previous years. But again, we are talking about reassuring our NATO allies about a long-term commitment, yet a substantial portion of our funding commitment is in an OCO account, which is not long-term budgeting. It is better than a CR, but it is not long-term funding. Is that accurate?

Mr. NORQUIST. Yes. The EDI has historically been funded through that OCO account, and it was last year and in prior years as well.

Mr. BROWN. So is this sound budgeting practice for the DOD and supporting a defense budget?

Mr. NORQUIST. So the use of the OCO is divided into two parts. As I talked earlier, there is the traditional one and we have broken it out in budget—

Mr. BROWN. I get that. I guess my question is this. Putting in some of these sort of, you know, modernization programs, long-term programs that are not exclusively for current or anticipated overseas contingency allowances; putting, for example, 533 nuclear bombs in OCO, is that sound budgeting or accounting practices?

Mr. NORQUIST. It is not how we have presented it the previous year.

Mr. BROWN. Okay. Let me just shift with the remaining time we have, because we haven't asked about the transgender policy. I think that budgets are an important reflection of our priorities and our values. Would you agree with that, Secretary Shanahan, that a budget reflects our values and our priorities?

Secretary SHANAHAN. Yes.

Mr. BROWN. So, you know, when President Truman desegregated the Armed Forces, he stated: "It is essential that there be maintained in the armed services of the United States the highest standards of democracy, with a quality of treatment and opportunity for all those who serve in our country's defense."

Would you agree with that, Secretary Shanahan?

Secretary SHANAHAN. Yes, I would.

Mr. BROWN. Are you aware that—and you have heard it today—the Army, as of September 30, failed to recruit enough soldiers to meet its projections for the last fiscal year?

Secretary SHANAHAN. Yes.

Mr. BROWN. And you have also heard that 71 percent of young Americans between age 17 and 24 are ineligible to serve in the military?

Secretary SHANAHAN. That is correct.

Mr. BROWN. Would you agree that a manpower shortage in the United States Armed Forces directly compromises national security?

Secretary SHANAHAN. Yes, it does.

Mr. BROWN. Are you aware that there are transgender soldiers serving in today's military who are meeting and even exceeding standards in every criterion that we use to measure performance in the military?

Secretary SHANAHAN. I don't have the specific—

Mr. BROWN. Okay. Because they testified in front of this committee about 3 weeks ago.

And are you aware of the fact that many of these transgender soldiers have successfully transitioned to their gender of preference?

Secretary SHANAHAN. I don't know that, but I—

Mr. BROWN. Yeah, because this is an important policy change. This isn't change in sort of like the Army green to the Army green and pink. This is a personnel policy that will exclude a certain category of Americans from serving. So I am just trying to inquire what you do know about it.

Are you aware that the Chief of Naval Operations, the Marine Commandant, the Army Chief, and the current Air Force Chief all testified publicly in their own words that transgenders serving in the military won't affect readiness, doesn't affect military discipline, has not been disruptive to the military service, nor has affected unit cohesion? Are you aware of that?

Secretary SHANAHAN. I am aware of their testimony, yes.

Mr. BROWN. And you know that in July of 2017, President Trump said that he consulted his generals and experts when he decided not to accept transgender individuals to serve in the military.

General Dunford, as the then senior military adviser to the President, is it accurate that within days of President Trump's ban on transgender service, that you stated: "I would just probably say that I believe any individual who meets the physical and mental standards and is worldwide deployable and is currently serving should be afforded the opportunity to continue to serve?" Did you say that?

General DUNFORD. I did say that, Congressman.

Mr. BROWN. Has your opinion changed on that?

General DUNFORD. It has not, Congressman.

Mr. BROWN. I will now turn to—thank you very much for your responses to my line of questions.

Mr. THORNBERRY. Mr. Chairman.

Mr. BROWN. Yes.

Mr. THORNBERRY. General, I think since we have gone down that road at some length over time, it is important now to put on the record a bit more about the process that Secretary Mattis used in reevaluating the prior administration's policy in this regard and a little bit more fulsome about the factors that were looked at, how

the decisions came to be made that he issued during his time. And I don't know either—I don't know which of you is better to do that, because you were both there, but I think it would be important to discuss that a bit.

General DUNFORD. I will take a first stab at it and then see if the Secretary wants to add.

So we did use the words physically, mentally, psychologically capable of being worldwide deployable without special accommodations. And then the Secretary engaged the leadership across the Department, but that also included medical experts from across the Department.

And so what the Secretary did was, based on the definitions, and I think you are sensitive as well, Ranking Member Thornberry, that some of this is still in litigation. So what I am trying to do is be as forthright right now as I can be without getting into that issue. But the Secretary included the leadership and then medical experts. And so then based on the definition of physically, mentally, psychologically capable of deploying, performing in our occupational fields, with the caveat without special accommodation, he proposed a revision to the 2017 policy. That was the process that was used to be able to do that.

Mr. THORNBERRY. Secretary Shanahan, you have anything you want to add?

Secretary SHANAHAN. No, I think the 2018 policy really just applies standards uniformly.

Mr. THORNBERRY. I think there is a misunderstanding that the policy was changed on the whim of a tweet. And that is part of the reason I think it is helpful for members to know that there was a deeper, longer process that was involved that resulted in the Mattis policy. Now, as y'all may know, we are going to have a Sense of Congress resolution on the floor this week, which is part of the reason that this is coming up right now. I don't think probably it is appropriate for us to debate that now, but as you point out, there is litigation underway. I suspect there will be more conversations about these various considerations, and that may well involve the Department and the service chiefs in looking at these issues.

I yield back.

Mr. BROWN. And we will now go to Mr. Banks.

Mr. BANKS. Thank you, Mr. Chairman.

Secretary Shanahan, have you ever had a conversation or any engagement with Secretary DeVos about sensitive research on college campuses and tools of Chinese espionage like Huawei, Confucius Institutes, et cetera?

Secretary SHANAHAN. I have not with Secretary DeVos, but I have with the FBI [Federal Bureau of Investigation].

Mr. BANKS. Okay. Do you believe that there is more that we can do to restrict Chinese nationals who are students on college campuses from being involved in DOD-funded sensitive research?

Secretary SHANAHAN. I think there are.

Mr. BANKS. Are there good reasons for to us do that?

Secretary SHANAHAN. Yes, there are.

Mr. BANKS. Okay, good. I will move on. Secretary Shanahan, on September 26 of last year, Secretary Mattis and VA [Department

of Veterans Affairs] Secretary Wilkie issued a joint statement promising a new and improved joint governance structure to manage MHS [Military Health System] GENESIS and the VA EHR [electronic health record] modernization. I have asked the VA officials multiple times to share the thought process, and zero information had been forthcoming.

I understand that a study of various options was completed in February. When can we expect such an announcement on the new her organization?

Secretary SHANAHAN. I will take that one for the record.

[The information referred to was not available at the time of printing.]

Mr. BANKS. Okay. And even better yet, before the announcement, would it be possible for some of us who are involved in this subject to receive a briefing of some sort?

Secretary SHANAHAN. Yeah.

Mr. BANKS. And is the line of thinking where are the synergies or the benefits being captured based on this unity of effort?

Secretary SHANAHAN. Yes.

Mr. BANKS. Thank you.

Moving on to another issue. Secretary Shanahan, in your opening testimony, you stated, quote: “We are applying maximum pressure to ISIS–K [Islamic State of Iraq and Syria-Khorasan Province] and other terrorist groups in Afghanistan to stymie any threats to the U.S. homeland.”

Can you elaborate on this military campaign, and how would a quick withdrawal impact the longevity of ISIS–K in Afghanistan?

Secretary SHANAHAN. Well, my reference there is to the work of General Miller and the special forces, and their work also with the Afghan Special Forces. As you are very well familiar with General Miller’s SOF background, he is—at this point in time, this anchors back to our South Asia strategy. So he is really bringing a concentrated effect, the SOF presence, and a more muscular effect, not just to al-Qaida and ISIS, but to the Taliban.

Mr. BANKS. Okay. General Dunford, can you state—you state the importance of the, quote, “Afghan-owned peace process.” Do you think our current negotiations exemplify that?

General DUNFORD. Congressman, you know, what we need to do is start reconciliation. So what I am optimistic about is that Ambassador Khalilzad has at least opened up a dialogue. And after 17 years, I am encouraged to see that.

The intent, the clear intent that is outlined by the Secretary of State and is in the terms of reference is that this process include legitimate representatives of the Afghan Government and the Afghan people. So that is the direction we are headed in. I think to look at the negotiations at any point in time would not be probably a full-sight picture.

Mr. BANKS. On that same subject, General, what conditions would you expect from the Taliban before the U.S. is safely able to withdraw from their country?

General DUNFORD. Beyond the Taliban, when I make a recommendation to the Secretary and the President about our future presence in Afghanistan, it will be based on our national interest

in the fact that Afghanistan is not a sanctuary from which terrorists can attack the American people and the American homeland.

Mr. BACON. Secretary, back to you. We have had some discussion already about the size and strength of the United States Navy. Even if every Congressman and the President agreed on the goal of a 355-ship fleet for decades to come, we still won't reach that desired goal for at least 40 years. What do you expect the balance of forces between the U.S. and China to be by the time we achieve a 355-fleet Navy?

Secretary SHANAHAN. Well, let me just speak to the time. I think it is 2034 in which we reach the 355-ship Navy. The discussion, you know, it is the future force structure won't necessarily be defined by our traditional measures of 355 ships. I mean, the real work that we are undergoing right now is what is the right mix. This goes back to, you know, autonomy, semi-autonomous, surface, subsurface mix. I don't think the course that the Chinese are on is the same course that these naval battles we fought on in the future.

The warfighting doctrine is going to change dramatically. That doesn't mean that we divorce ourselves from our current infrastructure, but I really think that this transition to future forces: space, cyber, missiles will have a profound impact on the type of Navy we have and the size of those vessels and the composition.

Mr. BANKS. Thank you.

Mr. BROWN. The gentleman's time has expired.

Mr. Kim.

Mr. KIM. Thank you so much for coming. I actually want to be able to continue on the great line of questioning that my colleague was just going through.

I think it is incredibly important that we think about what the American people are worried about, how they are understanding the issues that we are dealing with the military and with the security. And what I will tell you is that, oftentimes, the conversations that I have back in the district in New Jersey are different than the conversations we will have here in this room. We just heard some great line of questioning about Afghanistan. I think that is key, because that is something that is always on the minds of the American people in my district when they are thinking about security.

And while these other issues we have talked about are important, in this discussion here as we are thinking about our priorities and our budget, I think it is important for us to be able to make sure we are always being proactive about explaining to the American people what we are doing in Afghanistan and what our next steps are. So I just always encourage the three of you and others at the Pentagon and elsewhere to be thinking about how it is that we can raise those issues and continue to show the American people that these are not issues that we are sweeping under the rug, that we are going to stay engaged, especially after we know that there are people who are eligible to serve out in Afghanistan now who were in diapers on September 11. You know, that is just a core reality we need to comprehend here.

So I want to just bring a question back from the district to you, which is, you know, as we are going through this, what are those

circumstances that we need to be able to understand when we will no longer require U.S. military personnel in Afghanistan? I know that it is going to be dependent in part on the peace process and the discussion there. I understand that. I also understand that the South Asia strategy also talks a lot about how the regional countries are engaged in this.

But when I think about the train, advise, and assist mission, I see a lot of parallels between where we are at right now in Afghanistan and also in Iraq with these being core elements. But what I don't have a sense of is when do we no longer need to have U.S. personnel on the ground to be able to help support with train, advise, and assist or other capabilities there? General.

General DUNFORD. Congressman, I will take a stab at it, and then you can come back at me with additional questions. I mean, what I would tell your constituents back in the district is that when there is no longer a threat of terrorism in South Asia that would affect the homeland or the American people, then the mission can end. And until that point, you know, we—if we end the mission before that condition is achieved, then we will be managing risk of an attack on the homeland from South Asia.

And I would just say, today, given the almost 20 groups that operate in that area and certainly the intent, if not today, the capability of al-Qaida and ISIS-Khorasan, it is my judgment, my military judgment that continued pressure on those threats is directly and inextricably linked to the security of the American people.

Mr. KIM. Thank you for that. When we are making that assessment of the threats, especially to the homeland, I agree with you. That should be the measure by which we understand our involvement. What can you tell me that reassures me that the Afghan defense forces are ones that are being able to develop to be able to do that on their own? Even if we were to get to a point where you or some other general as a commander can be able to make that determination, if we were to then not have the Afghan forces have the capabilities where they can do that on their own, then obviously we may fall back into a situation again, as we have seen over the last couple of years in Iraq.

So on the Afghan security forces side, what circumstances, what conditions do they need, what proficiencies do you need to see in their forces to give you confidence that they would be able to handle this on their own?

General DUNFORD. Sure. And, Congressman, it is beyond just a military issue, right, so it is the capability of the Afghan National Defense Security Forces. It is also the capability of the Afghan Government to sustain those particular forces. And when would that happen? I guess what I would tell you is if you went back to 2013, we had 100,000 Americans on the ground, a total of 140,000 NATO forces, and that was the size force that was necessary for us to advance our national interests at that time. Today, we have about 13,000 Americans in Afghanistan as opposed to 100,000 Americans back in 2013.

So I know this isn't moving as fast as the American people, in particular your constituents, would want it to be, but what we have tried to do is make sure that the level of effort that we had in Afghanistan was consistent with the threat and consistent with the

capabilities of the Afghans to deal with that threat on their own. And it is our judgment today that, particularly with regard to combat-enabling capability and high-end special operations capability, the kind of support we are providing today continues to be necessary. I would add there are 39 other nations that are with us in supporting the Afghans right now.

Mr. KIM. Thank you for that. I think that is incredibly important.

I yield back.

Mr. BROWN. Mr. Gaetz.

Mr. GAETZ. Thank you, Mr. Chairman.

My questions relate to the zero-sum decisions we seem to be making relative to our fifth-generation and fourth-gen fighter aircraft. My first question is whether or not the manufacturing base has been a consideration in the decision to upgrade the F-15.

Mr. NORQUIST. Sir, I think when we looked at the factors that we talked about there is you want to maintain a competitive industrial base. You also want to make sure you have weapon systems with the right mix of capacity and capability and there is a mix between them.

Mr. GAETZ. Yeah, we are going to go through the capability. But specifically as to the manufacturing base, is it your view that this decision to make the F-15 upgrades is essential in that the manufacturing base justifies that decision?

Mr. NORQUIST. I don't know if it justifies it by itself. I just think that it is a factor that needs to be considered.

Mr. GAETZ. How many F-35As can we build in fiscal year 2020?

Mr. NORQUIST. I need to get you that number. Was their production rates—

Mr. GAETZ. Yeah. What is our manufacturing capacity for the aircraft that we have spent the better part of several decades getting ready to launch into the skies?

Mr. NORQUIST. We have got 78 in the budget. I don't know what their capacity is per year.

Mr. GAETZ. Procurement costs has been another justification for the decision to purchase few F-35s and to have the F-15X options that have been laid out. When you finish the F-15 upgrades with the full complement of targeting pods and sensors and jammers, what is the flyaway cost?

Mr. NORQUIST. I don't have the specifics on flyaway costs. The life—the maintenance and operating cost of them will still be lower.

Mr. GAETZ. We can get to that. First procurement cost. Was it an assumption we made that the procurement cost of the F-15 upgrades would be less than buying more F-35As?

Mr. NORQUIST. I believe the main driver was in the maintenance and the sustainment costs. The procurement costs were different, but they were not as dramatically different as the others.

Mr. GAETZ. The procurement cost of which is lower? How about that?

Mr. NORQUIST. Of the—fourth generation is lower.

Mr. GAETZ. So what you are telling me is it is cheaper to buy an upgrade—a fourth-gen F-15X than it is with the flyaway costs of an F-35A?

Mr. NORQUIST. I believe so. I can get you those, because I know we put those numbers together for the committees.

Mr. GAETZ. I am looking at an \$80 million flyaway cost on the 35A, and then once you lash the necessary, you know, electronic weapons pod, and other tech to the F-15X, you are looking at a \$90- to \$100 million flyaway cost. Does that sound right?

Mr. NORQUIST. I am not sure what other additional things you are attaching to it. It depends on the mission you are asking it to perform.

Mr. GAETZ. I would only—the mission set that we would assume when we made these budgetary decisions. If you could provide for the record for me the detailed breakdown on, not maintenance costs, procurement costs on these two weapons systems, that would be most helpful.

Mr. NORQUIST. Sure.

[The information referred to was not available at the time of printing.]

Mr. GAETZ. Operational costs, you were making a point about that as well. What is the basis for the view that the F-15X will have a lower operational costs?

Mr. NORQUIST. So the analysis that was done by our CAPE [Cost Assessment and Program Evaluation] organization that went through and compared the set of them. Because you talk about this, the purchase cost, the maintenance cost, and basically the life-cycle cost when you think of how long the aircraft lasts. And it also compares it for the different missions we need them to perform. If you are operating in a permissive environment, where you are looking at the capacity of the ability of the plane to do strike versus—

Mr. GAETZ. If you look at a melded rate, what is our—on the F-15X, what does it cost per hour to fly it?

Mr. NORQUIST. I don't have those. I know that they are available, but I didn't bring them with me today.

Mr. GAETZ. So as you guys provide for the record for me the procurement cost breakdown on the X versus the 35A, it would really be helpful to have the melded rate on hourly costs to fly the 35A and the F-15X. Because I am looking at some data that says that by 2025, we are going to drive down that cost on a 35A to \$25,000 per flying hour with a melded—understanding there are different missions, but as a melded rate, and that is a year after the budget says we would have the first operational 15Xs. So presumably, that would be a number consistent with the data that showed that to be \$27,000 to \$30,000 per flying hour. So if you could break that down for me.

Mr. NORQUIST. We would be happy to. That is one of the things we would actually be able to assemble, because following the briefing on the mix, these were some of the common questions that we wanted to is get every one of the committees the exact same set of data so that they understood the data—

[The information referred to was not available at the time of printing.]

Mr. GAETZ. Yeah. I am a little surprised you don't have it, you know, because there seems to be a pretty deliberate decision to

lean into that F-15X. And so I would have thought that that would be really relevant information for a budget discussion.

I want to take my final moments to just ask, Secretary Shanahan, can you explain the ways in which these budget priorities recognize the changing environment in the Western Hemisphere, Venezuela, and how we are going to make sure we support SOUTHCOM [U.S. Southern Command] effectively?

Secretary SHANAHAN. Yeah. So one of the fundamental assumptions that we have been building into the force mix and the force design—

Mr. BROWN. If you can do that in 30 seconds, that will work. Okay?

Secretary SHANAHAN. Yeah, I know. I will do it even more quickly.

We have designed this, and the chairman's been extraordinarily helpful here, dynamic force employment, so we can move forces quickly and reconstitute them in areas where there is demand and to increase interoperability. That flexibility allows us then to surge in the case of SOCOM when they have a different mission or they need to surge for a short period of time, but not to fundamentally change their footprint.

Mr. GAETZ. Thank you, Mr. Chairman. I yield back.

Mr. BROWN. Thank you.

Ms. Horn.

Ms. HORN. Thank you, Mr. Chairman. And thank you, General Dunford, Secretary Shanahan, and Mr. Norquist. I really appreciate your testimony.

I want to—I know we have had a few rounds of questions, but I want to dig little bit further into space realignment and priorities, which I believe are really important, and to Mr. Kim's point earlier about making sure that the public understands them. And I am going to direct my first questions to General Dunford because I would like to hear from you about this.

Is it safe to say that space assets exist across all of the branches and all of the functions of our Armed Forces today?

General DUNFORD. Space capabilities exist across three of the four services, all the services leverage space.

Ms. HORN. So space is a critical component of our warfighters' ability and our overall national security architecture?

General DUNFORD. Absolutely critical for everything from navigation, to communications, to targeting.

Ms. HORN. Okay. Also safe to say that developing space assets and capabilities is not an easy endeavor?

General DUNFORD. That is accurate.

Ms. HORN. Okay. So looking at this space question, and also, I wear another hat as the chair of the Space and Aeronautics Subcommittee, in the civilian space arena and knowing that we have a number of additional players in space, I want to dig into a little bit of what this looks like. Because I think it is important for us to understand both the needs, the capabilities, and the future development of this. It certainly would be my intention, and I think I have heard that from many of my colleagues on both sides of the aisle, that we make the best decisions in the best interest of our overall national security. It is not a partisan issue. It is about our

current and future capabilities, understanding that this architecture is important.

So across the different programs across the different services, do you think that it is possible that right now, and we have also talked about acquisition and cost and audits, that there may be programs or different capabilities being developed right now that are potentially duplicative or could be more efficiently utilized across a common architecture?

General DUNFORD. I think it is entirely possible that we could be more effective and efficient in developing space capabilities, and that really is the foundational argument for the Space Development Agency.

Ms. HORN. So following on with that, in the interest of not only protecting our national security, but understanding that with additional players, then hundreds of thousands of pieces of space debris, and not only our national security interests, but also commercial and our just general lives day to day depending on it, what, General Dunford—because we heard from you earlier, Secretary Shanahan. I appreciate that. What do you think about the model and the potential pathway forward? Does it need to be a separate force or could it be more of a corps model? What is your opinion on that?

General DUNFORD. In my view, Congresswoman, there is really two issues, right? There is the how do we best integrate joint capabilities today, and so that has been heretofore described as a sub-unified command moving through a unified command for Space Command. That takes the force we have today.

With regard to the specific organizational construct, I am satisfied with the one that we have laid out, and I am confident that over the next several years, it will be refined. It will be refined. I think the important thing is, in the current organizational construct we have today within the Department of the Air Force and within the joint warfighting force with a Space Command, gives us the ability to first train the right people, identify and train the right people, develop the right capabilities. And then when those capabilities are developed, field those capabilities in the most effective way for the warfighter.

So I think we have all the pieces in place. And I think, like every organization, it will grow over time. But we ought not to seek perfection before we start to step out and change the way we are doing business, given the importance of space. That would be my own thoughts on this.

Ms. HORN. Okay. And just to go back one more piece of this. I appreciate your answers. In the proposal, one thing that caused me to raise my eyebrows, there are some changes and some exemptions for employment practices and procedures that are within this proposal, and it provides broad exemptions to current law. I understand the need to realign as something else is being stood up. But I don't understand, and I will leave this to either one of you, can you explain to me the justification behind these broad exemptions?

Mr. NORQUIST. So there are two types. One was set up on personnel, and that was modeled after the personnel authorities of the National Reconnaissance Office. And then there was another one that was modeled after how the Air Force did its transition to

being a separate service. So those authorities are designed to be similar to other organizations, either stand up or space. It is one of the areas——

Mr. SMITH [presiding]. I am sorry, the gentlelady's time has expired.

I believe Mr. Lamborn is next. Go ahead.

Mr. LAMBORN. Thank you, Mr. Chairman. Thank you.

First a statement and then a question, first for the Secretary and then for the chairman. You stated earlier, Mr. Shanahan, that—Secretary Shanahan, that if forced to prioritize between Space Force, Space Command, and the Space Development Agency, Space Command would be your first priority. I would like to point out that the Space Command did exist in Colorado Springs from 1985 to 2002, and currently, Air Force Space Command and the National Space Defense Center are located at Peterson and Schriever, both in Colorado Springs.

So if the threat is as urgent as you suggest, and I believe it is, and if time is of the essence, I would highly recommend that Colorado Springs be the best location, given, in addition to those considerations, the massive number of space warfighters and infrastructure already in place. So I will just go on record as making that point.

My question is this: Can you describe why this administration and the Department of Defense have exhibited such a sense of urgency regarding the reformation of our military space enterprise? Is it because the threat is so dangerous and so imminent?

Secretary SHANAHAN. I would just say, fundamentally it is now a contested environment, and a \$19 trillion economy and the world's most powerful military runs off space. And in that contested domain, if we don't protect it, we are all at risk. So it is really—I mean, the urgency is the threat that so much of what we depend on, you know, our, you know, maps in our cars, you know, the ability to, you know, target our weapons is vulnerable.

Mr. LAMBORN. Well, then what would you say to someone who says, okay, I see a threat——

Secretary SHANAHAN. Yeah.

Mr. LAMBORN [continuing]. But can't we attack that problem within the existing structure? I know the Air Force, to their great credit, has come up with some reform proposals, but is that enough or do we need to go beyond?

Secretary SHANAHAN. Well, I think we need to go beyond. That is what the proposal represents and really the Space Development Agency. And I just—this is the part I would emphasize. Ignore the agency piece. You could call it space development organization. It is about development. It is not about acquisition.

You know, this is what, you know, General Schriever did. This is what was done in SDIO. We need to marry up the right programmatic skills so that we can go more quickly and leverage off of the innovation investment in commercial space.

Our acquisition rules can't accommodate that. And that is the restructure that we are proposing here, so we can go more quickly and use the technology that already exists. So, you know, to me, waiting to tailor our current environment will just take too long.

Mr. LAMBORN. Okay. Thank you.

Chairman Dunford, in your professional military opinion, especially given your career as a Marine in the Department of the Navy and the importance of culture in the services, can you explain the benefits that a separate military service focused on space will provide, whether as a space force or space corps, however it is denominated in whatever the final details are, which would not be gained by simply reforming military space within the existing structures?

General DUNFORD. Sure, Congressman. And in my experience, an organization that has a singular focus, has responsibility for identifying people, training people, equipping people, and then delivering them to the warfighter for integration has a much better chance, particularly given the importance of space. It is one of only five domains.

We have a much better chance with an organization that has that singular focus, as well as making sure that, with regard to prioritization and allocation of resources, that we don't drain away resources that might have been used for space for other reasons.

And I know being part of large organizations there is always going to be that temptation. And so I think having the opportunity, and frankly, from an oversight perspective, I would see the appeal from Congress as well, to make sure you have the oversight that you need to have that those resources that are necessary for us to be competitive in space are actually managed properly.

Mr. LAMBORN. And I know some have expressed concern about adding bureaucracy, quote/unquote, or additional flag officers. On the positive side, does that give more of a seat at the table, so to speak, to the folks in space, which is important?

General DUNFORD. Well, I think a senior leader who does sit at the table obviously has more influence. And someone asked me earlier, you know, should this member—should this person be a member of the Joint Chiefs of Staff. And, of course, if they are a service, then, by definition, I think that would be a reasonable thing to do.

What I have seen personally now over the last couple of years, particularly as a result of General Hyten being in the room, that when he has been around, given his experience in space, the dialogue quickly shifts and we think of things that we wouldn't have otherwise thought about without him in the room.

Mr. LAMBORN. Thank you.

The CHAIRMAN. The gentleman's time has expired.

Just for everyone's understanding in terms of the order here, there is one confusing aspect of this. Basically, you are in the order that you are in when the gavel falls. If you leave, you know, you are still in order. What happens—what has been happening a lot is people come back literally in the 2 to 3 minutes before they would be next. Under the rules, that person is then next.

Now, that is inconvenient, because I know a lot of members are anticipating, okay, he is next, then I am next. But even if you think you are next, if somebody walks in who was there at the gavel and who is in front of you, that person is next.

Personally, I am rethinking that rule because, you know, it is a little bit unfair to the people who are sort of planning on what is here. But that is just the way it is. So if you think you are next and I wind up calling on somebody else, that will be because some-

body else who was in front of you walked back in. And that is going to happen right now.

Ms. Houlahan, you are up.

Ms. HOULAHAN. Thank you, Mr. Chairman.

I have a number of questions. And thank you very much for your testimony today, gentlemen, Mr. Shanahan and General Dunford and Mr. Norquist. I am going to focus my questions today on the impact of the fiscal year 2020 budget on our defense industrial base and our investment specifically in cybersecurity across the DOD enterprise.

But before I did that, I wanted to start by echoing some of my colleagues who have gone before me in their frustration with the Department's interactions with Congress over the funding for the President's planned border wall, what you referred to in your remarks as the border situation.

I led a letter from my colleagues from Pennsylvania, sir, Mr. Shanahan, to you asking if you could provide a list of unawarded MILCON projects in Pennsylvania that would be imperiled. And I also asked for that list to contain an assessment as well of the impact if those items were canceled or delayed as a result of the border wall or the border situation.

And I was really glad to receive the list of Pennsylvania projects, but I still haven't seen any sort of assessment on the impact of those projects if they were not to come to fruition in this time-frame, nor have I seen any questions for the record from this committee's first meeting back in January where I asked for an assessment of the impact on border deployment on our service members' readiness, and I serve on the Readiness Subcommittee as well.

And I would certainly have hoped that the Department would have conducted an impact assessment and briefed it to the President before anyone started talking about moving this money around. And I definitely would have hoped that this information would be more readily available now coming up on 3 months from when we initially asked for it.

There are four projects in Pennsylvania, as it turns out, that are at risk if this plan moves toward. And I wanted to, just for the sake of my time, highlight only one. Last year's appropriations bill included \$71 million for the construction of a new facility in Philadelphia where we manufacture the propulser systems for the *Virginia*- and *Columbia*-class submarines.

The Naval Foundry and Propeller Center is essential for the design, manufacturing, and repair of propellers for the U.S. Navy. A new facility is needed to accommodate the increase in personnel and equipment that comes from the push to manufacture these new submarines. And so simply put, even though this is a propeller, we can't meet the administration's goals of a new submarine fleet without this.

Last week, the Commandant of the Marine Corps wrote that supporting the, quote, unplanned and unbudgeted southern border deployment was an exacerbation of an already challenging budget year for the Marine Corps.

So I will move on to my questions soon, but I just wanted to say for the record that the ill-advised plan really has significant readiness ramifications. And the American people, particularly Pennsyl-

vanians, really deserve to know what they are, not just the list of the projects that are possible on the chopping block.

And this administration has been very vocal about its frustration with Congress and its struggles to provide appropriate appropriations on time. And I think that, frankly, the criticism is very fair. But now that I am also learning a little bit more about the referenced kind of department reprogramming, I think it is also fair to say that that burden is not just shared by the Congress, but also by the fact that we are re-appropriating money and that causes, certainly, uncertainty amongst the supply chain.

I have heard from companies across Pennsylvania that they are struggling to hire, to train, and to retain staff, as well as to make capital investments. And so now I guess my questions to you are, did the Department actually assess the impact on the defense supply chain, especially on small businesses, before deciding to move ahead with proposing these cuts and delays? And if not, why not? And if so, what were those assessments?

Secretary SHANAHAN. And you are referring to the military—

Ms. HOULAHAN. The case in study of the four Pennsylvanian projects and what their impact would be, you know, on the supply chain if we were to pull back on those for small businesses and suppliers in my community particularly.

Secretary SHANAHAN. Right. I can't speak to the total assessment. I will let David Norquist comment. But I believe the project that you are referring to on the propeller capacity is to be awarded in July, so that would not be one of the projects that would be—

Ms. HOULAHAN. Sir, it was provided to us as one of the possibilities.

Mr. NORQUIST. Which, if I could clarify, what was provided to the Congress was a list of projects that had not been awarded since January of this year. And so that was the full vision of what is in the pipeline.

What the Secretary has directed is to not affect any of those projects that were scheduled to be awarded before 1 October, 30 December. The reason for that is that in the budget there was a request for military construction funding in order to backfill those, so those projects would be.

I know that the chairman has views on that, but I understand the Department's intent was to make sure there wasn't an effect on the industrial base or on those facilities by ensuring that, by the time you got to the next year, when the scheduled—projects were scheduled to be awarded, there would be additional MILCON to keep them going.

But my understanding is the project you specifically mentioned would not be affected under either circumstance.

Ms. HOULAHAN. It just seems—

The CHAIRMAN. Thank you. But the gentlelady's time has expired.

Ms. HOULAHAN. Oh, I am sorry. I didn't notice that. Sorry, sir.

The CHAIRMAN. And, Mr. Bacon, you are up.

Mr. BACON. Thank you, Mr. Chairman.

I have to apologize right upfront. I lost my voice last week, so I will try my best. But first, I want to thank you all for being here

and appreciate your leadership. Thanks for stepping forward and doing this. Our country needs people to step forward and lead.

My first question revolves around readiness and modernization. You know, 26 months ago when President Trump came in, our readiness levels were the worst seen since 1977. We had 58 combat brigades, 3 could—in the Army, only 3 could deploy that were ready to fight tonight. Half the Navy aircraft couldn't fly. Air Force pilots are getting about half the flying time that they needed in training. I thought it was negligent for Congress to let us get to this spot. And we dug a modernization hole as well with some of the oldest aircraft, ships, and tanks in the history of our country when you look at the average age. So since 2010 till 2 years ago, we cut the military budget 18 percent. And the last 2 years, we have added 60 percent of those cuts back in.

General Dunford, Chairman, could you tell us what has been the impact of this increase on our readiness and modernization, and what happens if we don't sustain it? Thank you.

General DUNFORD. Sure. Congressman, I mean, it really is very simple. Number one, we are better able to meet the requirements that we have day to day. You know, I manage the force for the Secretary to make recommendations for him on deployment of the force. And so if you think about the inventory of forces that are available for day-to-day operations, there are more forces available.

Perhaps more importantly, we benchmark very carefully our ability to respond in the event deterrence fails in places like Korea or in Europe and so forth. And our ability to respond to a major contingency today is significantly greater than it was before.

So there is a lot below that, right. I mean, the Air Force fixing maintainers, numbers of airplanes that are available, modernization efforts that are ongoing and so forth. But at the end of the day, it is about the deliverable. It is about meeting today's requirements and then meeting our overall requirements to respond to a contingency if deterrence fails. And in both of those areas, the progress is measurable.

Mr. BACON. Mr. Shanahan, I want to ask you a question about the triad. As you know, there is proposals to take us to a dyad. How just important is it to maintain the triad that we have had for 60 years? What does it do to nuclear deterrence to do away with our ICBMs? Thank you.

Secretary SHANAHAN. I think, you know, maybe two comments. If something has worked well for 70 years and the environment hasn't fundamentally changed, why would we change it? The obsolescence is a fundamental issue we have to address. But more importantly, I think it comes down to why would we unilaterally disarm when our competitors are arming themselves?

Mr. BACON. As part of that, could you tell us how important nuclear command, control, and communications upgrades or modernization is also needed?

Secretary SHANAHAN. Yeah. Well, the obsolescence of the triad, it is clear that we need to make those investments. And this was a little bit of the discussion we were having earlier around 5G. The nuclear command and control communication system is so fundamentally vital. And when we think about spoofing or we think about systems being compromised, and as we invest in a new space

architecture, new terrestrial architecture, we need to have total confidence in that the information that is being provided to our commanders and Commanders in Chief is completely trusted. And, you know, this is a new world in terms of cyber, so that is probably one of the most, you know, critical modernization programs that we have before the Department.

Mr. BACON. I agree.

Chairman, I have got to follow up on a question on electronic warfare. You know, we have five domains. We don't consider the electronic magnetic spectrum as a separate domain, though it is a physical domain. All of our radio messaging goes through that. Radar uses it. But our doctrine doesn't identify the electronic magnetic spectrum domain as that, and I think it should.

But I would be curious for your military professional opinion. Should we make the electronic magnetic spectrum a separate domain? Because we want to own it and prevent the enemy from using it.

General DUNFORD. Congressman, let me start by agreeing with you, we want to own it. And frankly, in the recommendation I made to the Secretary for this year's program recommendations, the electromagnetic spectrum was among the areas we highlighted. And as we do competitive area studies, that area comes back.

There are a lot of critical functions inside of our warfighting capabilities that aren't in and of themselves domains. And so I right now am comfortable with the electromagnetic spectrum being something we look at through the lens of a function.

Mr. BACON. Mr. Chairman, I yield back. But I thank you for your testimony and your time.

The CHAIRMAN. Thank you.

Mr. Cisneros.

Mr. CISNEROS. Thank you, Mr. Chairman.

Mr. Secretary, General, Mr. Norquist, I want to thank you all for taking your time. It has been a long day for you already, and thank you for being here.

I want to talk to you about a specific issue dealing with California. There is a fight—a contract has been awarded for a flight simulator for the 146th Airlift Wing of California's Air National Guard located at Naval Air Station Point Mugu. In November of last year, the installation had to be evacuated due to wildfires, and it so happened the 146th Airlift Wing also has been critical to combatting the wildfires with its C-130J aircraft.

Now, you had said earlier in your testimony that any contract that was going to be awarded after September 30, 2019, the funding was going to be pulled. You know, which this specific simulator, the contract has been awarded, was going to be awarded after the date that you had mentioned. Any delay of the critical flight simulator programming for the 146th Airlift Wing would undermine readiness and impede training for pilots combatting wildfire and conducting search and rescue.

I know this is a big issue for being a Californian. I know it is a big issue for Congresswoman Julia Brownley, who this is specifically in her district, and all Members of Congress in California. Why would we cut funding for this critical flight simulator when

it is so strategic to the training that these pilots need in order to support this critical mission here in California?

Mr. NORQUIST. So the intention is not to cut funding for any of those projects. I think there is two things. First of all, just being in the pool doesn't mean that those projects are going to be selected. The Secretary hasn't made a decision yet on the use of 2808 or the authorities.

The others that we have requested money in order to ensure those projects continue, and so our hope would be that those fundings would be included in any enacted bill and allow us to ensure those essential projects go forward.

Mr. CISNEROS. You know, Secretary Shanahan, I also notice in your written testimony you wrote, our responsibility is to remain responsible stewards of your trust and the American taxpayers' hard-earned tax dollars.

Congress has already funded these programs. Why would we fund them again, and how is that being responsible in watching the taxpayers' tax dollars?

Secretary SHANAHAN. We are going to be responsible managing the taxpayers' money, absolutely. I mean, that is my role, and you have my assurance that we are going to, in this department, take care of our people, maintain readiness, and modernize to fight future threats.

Mr. CISNEROS. But would you say making them pay for the same thing twice is being responsible with the taxpayers' dollars? You wouldn't go and buy a vehicle and then have the car dealer take it away and say, you know what, I gave it to somebody else, you are going to have to pay for it again. Why would we do that to the American taxpayer?

Secretary SHANAHAN. Yeah. We haven't paid for it once yet, you know. This is the process that we are stepping through. And I think that was the place where we started this discussion. It is a complicated situation, and it is tied to a new budget. We are really buying time so we can backfill these projects.

Mr. CISNEROS. All right. But if you are taking money away from a project that has already been funded and then you are asking to fund that project again, it is being paid for twice. But I am going to change topics here real quick.

General, the Commandant of the Marine Corps, you know, recently made a statement about deployments down to the border and having to, you know, fund transfers under the President's emergency declaration, among other unexpected demands, have posed unacceptable risk to the Marine Corps combat readiness and solvency. He said they haven't been able to fund other training that had been planned.

Do you agree with his assessment that sending troops, Marines down to the border is hurting Marine Corps readiness?

General DUNFORD. Congressman, I would like to put that letter in full context. What the Commandant of the Marine Corps did—and I read the letter and spoke to this—spoke to him, as well as the Secretary of the Navy about it—he listed a number of unanticipated bills that the Marine Corps was confronted with in this fiscal year, one of which was the southwest border. Those bills in the ag-

gregate created difficulties for him in funding other priorities, and that really was what it was about.

It wasn't a letter—this particular letter wasn't a letter about the southwest border and didn't single out the southwest border deployment as being the issue. It identified the southwest border as one of the unfunded—one of the unanticipated bills.

The CHAIRMAN. Thank you. And the gentleman's time has expired.

Votes are coming up, they are estimating sometime between now and the top of the hour. We will go until 10 minutes after the votes are called at the most and then we will be done.

Mr. DesJarlais.

Dr. DESJARLAIS. Thank you, Mr. Chairman. And thank you all for being here today.

Secretary Shanahan and Chairman Dunford, many of your predecessors have touted our nuclear enterprise as a, if not the, top priority within the Department of Defense. Do you agree with this?

Secretary SHANAHAN. It is our singular most important mission.

General DUNFORD. I am on record saying the same many times.

Dr. DESJARLAIS. Yes, sir. Thank you. Chairman Dunford, do you also believe, then, it is important to advance our low-yield nuclear weapons systems?

General DUNFORD. I do, Congressman, and I can explain that if you want me to explain the reason why.

Dr. DESJARLAIS. Maybe just—yes, please.

General DUNFORD. It would probably be hard to do it in—

Dr. DESJARLAIS. Oh, okay.

General DUNFORD. But I would be happy to answer that question when the time—you know, for the record or whatever, because I do feel like that low-yield option is critical for deterrence.

Dr. DESJARLAIS. Okay. What does this budget do to accelerate U.S. development of hypersonic weapons?

Secretary SHANAHAN. Let me get you the number. We have accelerated the hypersonic testing and deployment several years with this budget. It is an extra \$2.6 billion in this year's top line.

Dr. DESJARLAIS. Okay. And do you think that it is on an appropriate and comfortable pace considering our adversaries' advancements?

Secretary SHANAHAN. Well, I would like to be a bit further along, but this is a much faster pace than we have had in the last couple years.

Dr. DESJARLAIS. Okay. Chairman Dunford, many of the Department of Energy's nuclear weapon support facilities are over 40 years old and are in need of refurbishment. How important is a modern Department of Energy nuclear weapons development capability to your ability to provide a credible nuclear deterrence?

General DUNFORD. They are inextricably linked, Congressman.

Dr. DESJARLAIS. Okay. Secretary Shanahan, what do you foresee the National Guard's role being in the Space Force?

Secretary SHANAHAN. That is a good one, yeah. We have had a lot of debate, and General Lengyel has been at the center of that debate. There is some complexities about how those resources align and how their training and support is conducted today. But as they do in so many other elements of the total force, they will play a

critical role. The question today more is around how do we organize them than it is the importance of their role.

Dr. DESJARLAIS. Okay. And I am going to give 2 minutes back, Mr. Chairman. I yield back. Thank you.

The CHAIRMAN. Ms. Torres Small.

Ms. TORRES SMALL. Good afternoon, everyone. Thank you for taking the time to be here today. Thank you also for your service, what you do for the men and women in uniform as well as for the entire country. Thank you.

As we discuss the \$750 billion national defense budget, I speak for many of my colleagues on both sides of the aisle when I express my deep concern regarding the Department of Defense's failure to proactively address PFAS contaminants on and around military establishments.

I deeply appreciate Congressman Bergman bringing this up. And your comments that, Acting Secretary Shanahan, that the EPA [Environmental Protection Agency] is working to address those standards, meanwhile you are merely working to eliminate use of PFAS, underscores that this response is wholly insufficient.

I sincerely hope that the Department hears the concerns of my colleagues and stops hiding behind bureaucratic and regulatory red tape to avoid helping communities clean up PFAS contaminants.

To that end, Acting Secretary Shanahan, 2 weeks ago when you testified before SASC [Senate Armed Services Committee], Senator Heinrich asked if you read a New York Times article titled, "Pentagon Pushes for Weaker Standards on Chemicals Contaminating Drinking Water." Have you had the opportunity to read that article?

Secretary SHANAHAN. Yes, I have.

Ms. TORRES SMALL. Thank you. Can you please speak on Senator Heinrich's second question as well? Is the article accurate and is the Pentagon pushing the Trump administration to adopt weaker standards for ground water pollution caused by PFAS and other chemicals?

Secretary SHANAHAN. The article is not accurate, and the Department of Defense is not asking for the standard to be lowered.

Ms. TORRES SMALL. Thank you. I hope that your actions will also reflect the importance of this issue. Thank you.

I want to close by reiterating what Senator Heinrich said to you: I know there is a right way to do this. It is to follow the science. The right way to do this is not to set a standard that is based on trying to limit liability.

I yield the remainder of my time.

The CHAIRMAN. Ms. Hill.

Ms. HILL. Acting Secretary Shanahan, the President's fiscal year 2020 budget request has a \$600 million decline in funding for the European Defense Initiative, yet in your testimony today, you noted that Russia last year conducted its largest military exercise in almost 40 years and is escalating intimidation efforts.

What is the rationale for reducing this funding when there is an increasingly hostile actor next door and our own National Defense Strategy says that Russia is one of our two biggest concerns?

Secretary SHANAHAN. I will ask the comptroller to walk you through the numbers. But fundamentally, what it represents is

that the standing up of the initiative, so think of it as either the setup costs or the nonrecurring costs, are complete, and now it is really about sustaining the level of effort and conducting more exercises and actually deploying more troops.

David.

Mr. NORQUIST. Correct. So the amount we are investing in presence and putting folks is up \$170 million. The amount we are spending on training is up \$300 million. What is down is the prepositioning of equipment, because once the equipment has been moved into place, you don't need to keep paying for it. So while the cost is coming down, the actual level of activity is going up.

Ms. HILL. Okay. Thank you. So do we have—does this have anything to do with the fact that European countries are filling some of those gaps, or do you have any sense that this will affect our position in any way?

Secretary SHANAHAN. Well, I think they are filling gaps and they will fill more gaps, particularly with the, you know, initiative to have, you know, more battalions, you know, more battleships to be able to deploy more quickly the 430s initiative. We also are conducting, you know, more exercises with NATO. So I think what you are seeing is just more of the front-end flow of money, especially from NATO, starting to get to the front line.

This is—you know, for NATO, what I think we will see with their uptick in investment is more capability and capacity coming online. What you are seeing with the European Defense Initiative is the United States leading the integration and conducting higher level exercises.

Ms. HILL. Thank you. So can you give some specific examples of where the—where NATO is filling those gaps or increasing?

Secretary SHANAHAN. I will take that for the record, but, you know, I have seen some of those plans. I have seen some of the contributions that they are making to increase capability, as well as the exercises that we have organized so that—we are conducting more sophisticated exercises like Trident Juncture. But let me take that for the record and provide you an update.

[The information referred to was not available at the time of printing.]

Ms. HILL. Thank you. Do you have any concerns about the signals this might send to our allies and partners in Europe, considering the comments that are coming from this administration and our President, the ridicule for NATO and the, you know, the proposed cuts that—the signals that might send to Putin and to our partners and allies?

Secretary SHANAHAN. I have had probably, since I have been in this position, maybe 50 conversations with my counterparts in NATO, and it has really been the opposite. They are more engaged. They have a strong sense of leaning forward into these exercises, and I think they are more encouraged by our participation and presence in Europe today.

Ms. HILL. Well, I had different conversations when I was in Europe for the Munich Conference, and it seemed like the tone was a bit more insecure. But I am curious why you feel like that is the case.

Secretary SHANAHAN. Well, this is—so I think about the defense ministers. I am not—I don't know who you were speaking with, but this was the defense ministers as we are doing the planning. And it wasn't just in terms of the NATO exercises there. This also had to do with our activity in Afghanistan.

But in particular around NATO, and I think the best evidence of support was their unanimous support to our withdrawal from the INF. It was writ large in terms of supporting our position. But the side conversations to the person is thank you for pushing us. We look forward to the exercises, because the exercises that we have been conducting have been very successful.

Ms. HILL. General Dunford, do you have any comments on this?

General DUNFORD. The only thing I would say, Congresswoman, is, you know, other nations are contributing more, but no nation has increased its commitment to NATO more than the United States since 2015. So the European Defense Initiative, the addition of the second fleet down at Norfolk to ensure the transatlantic link, the increased intelligence people we provided to the SOCOM hub and so forth. I would just tell you, my peers understand that the United States of America is still the most significant contributor to NATO and the most significant contributor to the deterrence and the defense that NATO provides.

Ms. HILL. Thank you.

The CHAIRMAN. Thank you, Ms. Hill.

Ms. Haaland. Ms. Haaland will be last because we have votes.

Ms. HAALAND. Thank you, Chairman. Thank you.

Thank you, gentlemen, for being here today. I appreciate your time immensely.

I would like to just sort of continue the comments of my esteemed colleague from New Mexico in a different way, I guess. I will ask a few different questions, but it is concerning the contamination of military installations.

The fiscal year 2020 budget request contains \$1.1 billion for environmental restoration, down from the fiscal year 2019 enacted amount of \$1.24 billion. In my district, the fuel spill on Kirtland Air Force Base, which resulted in 24 million gallons of jet fuel contaminating our ground soil and threatening Albuquerque's clean drinking water, has yet to be properly cleaned. At other bases in New Mexico, in many other DOD installations throughout the country, dangerous levels of PFAS have been found in drinking water, and this contamination seeks to ruin people's lives.

Given the scale of these and other environmental issues at DOD installations, please explain how the DOD's environmental restoration efforts will address public and environmental health and safety and your rationale for the decreased budget request.

And I will add that you testified earlier about the money you essentially saved on not having to spend it on military personnel, which is, you know—which you—which everybody wants to, you know, see go toward the wall. And I am asking, why not spend money on cleaning up contamination that the military has caused?

Mr. NORQUIST. So let me make sure I have the—right here is for the environmental restoration we have—I am not able to follow that.

So let me double check the environmental. My understanding was that the program was relatively flat, but I will double-check. There is—sometimes we get congressional adds that raise the 2019 enacted, so even when we are the same number from year to year, you can see that trend.

I think when it comes to the contamination concerns you raised about—you know, we have three priorities. First is to protect and make sure people are drinking safe water; the second one is our responsibility to remediate those that are related to the defense establishment and our operations; and the third is to research alternatives. The Secretary talked about this in his comments, which is finding alternatives to be able to reduce our use of those contaminants as well at the same time we are doing the cleanup.

Ms. HAALAND. And so you feel that by spending less money on environmental restoration you can essentially achieve those ends? Is that what you are saying?

Mr. NORQUIST. I don't think we are looking to reduce our investment in this area.

Ms. HAALAND. Okay. Thank you.

Last, I am going to switch gears over to transgender troops. Do you agree with me that the United States is stronger and safer when our military reflects our Nation's diversity and upholds the constitutional belief that all people are created equal? General? Secretary?

General DUNFORD. Congresswoman, I couldn't agree more.

Ms. HAALAND. Okay.

Secretary SHANAHAN. I agree.

Ms. HAALAND. Okay. Do you agree with me that the administration's current policy of obstructing transgender individuals' freedom to serve in the United States military essentially makes a mockery of this commitment?

General DUNFORD. Congresswoman, just to be clear, the current policy that is in place that was signed in 2017 allows transgenders to serve in the U.S. military.

Ms. HAALAND. So they can serve freely right now?

General DUNFORD. Today they can.

Ms. HAALAND. Okay. Very good.

And I have heard that—I mean, an argument is put forth that, you know, spending is a concern, that they—that we don't want taxpayer money spent on gender dysphoria issues, such as psychotherapy, prescriptions, surgeries, and so forth. And I just want you to know that we realize that that portion of the budget is minuscule in comparison to other things like, for example, erectile dysfunction, which took \$84 million out of the DOD budget.

So I just want you to know that I support wholeheartedly every single American who wants to serve in our military, that they have an opportunity to do so. And that with respect to budgets, knowing that it is a minuscule amount that is spent on transgender troops, I don't think that is anything that should dissuade them or us from their service.

And I yield my time, Chairman.

The CHAIRMAN. Thank you.

If I could just follow up on that just briefly. It is a bit—the policy that was just announced by the administration through the DOD

is a bit more complicated. The Secretary and I talked about this a little bit yesterday. And I don't think it is the correct policy.

It is not a blanket ban on people who are transgender from serving in the military. It does, however, make it very difficult for people, depending on where they are at, in terms are they in the service, are they trying to join, have they had transition surgery, all of those things have really, really complicated the ability of transgender people to serve in the military.

And I also feel that the policy, as announced, does not accurately reflect the—well, the medical facts, but we will be dealing with that later. And I understand you have struggled to try and get the right policy there. But it is considerably more complicated than even I thought at first glance.

But I don't think right now the policy meets the standards that Ms. Haaland was hoping to have in terms of allowing diverse people to serve, assuming that they are qualified, assuming that they can meet the qualifications for whatever job it is they are supposed to do in the military.

Mr. Thornberry, do you have anything, quickly?

Mr. THORNBERRY. I do, Mr. Chairman.

In the presence of the Secretary and chairman and the comptroller, I just want to note that while we have been meeting today, Andy Marshall has passed away. He ran the Office of Net Assessment from the Nixon administration to the Obama administration. I can think of fewer people who have had a bigger impact on focusing our defense efforts, our national security in the right direction than Mr. Marshall.

And we talked about a lot of stuff today, but I think as General Dunford started out, it is about people. Some of them are not even in uniform. But it is a remarkable life. He has been before our committee I don't know how many times over the years. So I wanted to note that that passing and—but also to honor his memory because he made such a difference.

The CHAIRMAN. And I think that is a very appropriate note to end on. We are adjourned. I thank you, gentlemen.

[Whereupon, at 1:52 p.m., the committee was adjourned.]

A P P E N D I X

MARCH 26, 2019

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MARCH 26, 2019

Acting Secretary of Defense Patrick Shanahan
House Armed Services Committee
Written Statement for the Record
26 March 2019

INTRODUCTION

Chairman Smith, Ranking Member Thornberry, distinguished members of the Committee, I appreciate the opportunity to testify in support of the President's budget request for Fiscal Year (FY) 2020. I am joined today by Chairman of the Joint Chiefs of Staff, General Joseph Dunford, and the Department's Comptroller and Chief Financial Officer, Mr. David Norquist.

The size, scale, and importance of collaboration between Congress and the Department of Defense (DoD) shows we are united in our purpose to protect and defend our Nation. During my time as Deputy Secretary of Defense and now as Acting Secretary of Defense, I have engaged in substantive discussions with many members of this Committee. I look forward to continuing our engagements, in this hearing and beyond, with both long-serving and new members, as the Department drives results along our strategic priorities.

We in DoD appreciate Congress's partnership in repeatedly demonstrating the bipartisan nature of defense. I thank Congress for voting to lift budgetary caps and providing sustained funding increases over the last two years, which have helped our military meet today's challenges while preparing for those of tomorrow. Members of this Committee, the entire Congress, and the American people can rest assured that DoD has efficiently and effectively invested your money. Thank you, in particular, for your support of the FY2019 2.6 percent pay increase for our military personnel.

Our responsibility is to remain responsible stewards of your trust and the American people's hard-earned tax dollars. DoD has accelerated necessary changes in how we develop, posture, and employ our Joint Force. We are taking a clear-eyed approach to the strategic environment in which we operate and marrying our past experiences to new ideas, driving progress and fostering innovation in the process.

Our FY2020 budget reflects the President's vision for prioritizing the security, prosperity, and interests of the American people. It also reflects my vision for the future – one marked by a more lethal, results-oriented Department of Defense with the capabilities and capacity to ensure national security and implement our National Defense Strategy (NDS) at the speed of relevance. Today I look forward to discussing that vision and how it is reflected in DoD's posture and resourcing decisions.

THE 2018 NDS: AN ENDURING FRAMEWORK

To provide context for that discussion, I want to take us back in time: two years ago, our Department had brand new civilian leadership ready to drive results. With a military enduring the longest continuous duration of combat in American history, we contended with a host of challenges, including an increase in North Korean missile testing; an aggressive Iran; violent extremists in Iraq, Syria, and Afghanistan; and growing strategic competition with China and Russia. In addition, cyber and space emerged as contested, warfighting domains, further complicating an already complex security environment.

Amidst these challenges, the release of our 2018 NDS last January provided the strategic unity DoD needed, with clear direction on restoring military readiness and modernizing the Joint Force to address great power competition.

The 2018 NDS's unified framework enables a potent combination of teamwork, resources, and an unmatched network of allies and partners stepping up to shoulder their share of the burden for international security. The NDS also fosters alignment within the Department, the Interagency, industry, and Congress.

Fourteen months after its release, I say with conviction: the NDS remains the most effective aligning mechanism for the Department. Its implementation is our most critical mission. Yet, strategy cannot be static; it must be constantly reevaluated. Last month, my staff concluded a clear-eyed assessment of our NDS priorities and our progress in meeting them, highlighting our successes and making clear we still have more work to do. Most significantly, it reaffirmed that erosion of our competitive edge against China and Russia continues to be DoD's most pressing "central problem." Our three primary lines of effort – increasing our military's lethality, strengthening our network of alliances and partnerships, and reforming DoD's business practices – remain the most effective avenues for addressing this challenge.

I thank Congress for its own evaluation via the NDS Commission. Having reviewed the findings of both our internal DoD assessment and of the Commission's report, I am confident we are aligned on the most critical matters. The few areas where we did not agree reflect the reality that finite resources require tough choices. DoD stands by these choices as necessary components of our strategic approach.

As our Department has aligned behind our Strategy, our competitors have not been complacent. They have accelerated their own military modernization efforts and vigorously pursued the development and fielding of advanced technologies with a clear intent: create an asymmetric military advantage against us, our allies, and our partners.

PRIORITY THREATS & POLICY OBJECTIVES

THE CHINA THREAT

As this Committee recognizes, the Chinese Communist Party exports coercive influence far beyond its borders while internally wielding authoritarian governance over its own people. To achieve hegemony in the Indo-Pacific in the near term and shape a world consistent with its authoritarian model, China is: (1) aggressively modernizing its military, (2) systematically stealing science and technology and seeking military advantage through a strategy of Military-Civil fusion; (3) undermining the rules-based international order, which has benefited all countries, including China, and (4) building an international network of coercion to further its economic and security objectives.

Military Modernization

The trajectory of China's military spending is clear. In just twenty years, China's official defense budget soared from roughly \$20 billion in 1998 to \$170 billion in 2018, with actual spending even higher. Just last week, China announced a projected 7.5 percent increase in defense spending in 2019. China devotes these funds to aggressive military modernization and advanced weaponry development, from nuclear and missile capabilities to space and cyber. Accounting for purchasing power and the significant portion of our military budget going to pay and benefits, today, China's defense spending approaches that of the United States.

China has made investments specifically intended to offset U.S. advantages, including robust anti-access/area-denial (A2/AD) networks, more lethal forces, and new strategic capabilities. If deployed to overwhelm U.S. or allied combat power at initial stages of a conflict, these capabilities could seek to achieve a "fait accompli" that would make reversing Chinese gains more difficult, militarily and politically. Implementation of our Strategy ensures we have the capabilities, posture, and employment of forces so this never comes to pass.

On the nuclear front, China is developing long-range bomber capabilities that, if successful, would make it one of only three nations in the world to possess a nuclear triad. In addition, China is building up its inventory of missiles, focusing on those intended to circumvent U.S. and allied defenses and deny the United States critical military access to the Indo-Pacific. Within the past five years alone, China has successfully tested hypersonic cruise and boost glide weapons concepts for these purposes.

In 2018, China conducted more space launches than any other nation. In choosing to develop counterspace and dual-use space capabilities and enhance space-based intelligence, surveillance and reconnaissance, China has demonstrated its ability to weaponize space, if desired. We, in turn, cannot ignore China's ability to target U.S. and allied space capabilities. We also cannot ignore China's ambitions in the cyber domain, which it recognizes as the battlefield's "nerve

center.” With all People’s Liberation Army (PLA) cyber operations coordinated under one roof, China can operate in this contested domain without bureaucratic red tape to slow it down.

Technology Theft

The rate at which China is systematically stealing U.S. and allied technology for its own military gain is staggering. Reversing this dangerous trend – one which could impact our troops on the battlefield – means acknowledging reality: every Chinese company is at risk of being either a witting or unwitting accomplice in China’s state-sponsored theft of other nations’ military and civilian technology. To quote China’s own cybersecurity law, private companies are required to “provide technical support and assistance to public security organs and national security organs,” whether they want to or not. Any U.S. or allied company that works with Chinese companies, without proper safeguards, thus opens itself to theft as well.

To grasp the pervasiveness of the problem, look to the Federal Bureau of Investigation (FBI). There are open Chinese economic espionage or technology theft cases in nearly all FBI field offices. For years, the U.S. Department of Justice (DoJ) has indicted members of the Chinese state and military for stealing U.S. technology. In January, DoJ recognized China’s escalating tactics and took a step further, indicting executives of Chinese telecommunications company Huawei for scheming to steal T-Mobile’s trade secrets.

Huawei exemplifies the Chinese Communist Party’s systemic, organized, and state-driven approach to achieve global leadership in advanced technology. With initiatives like the Digital Silk Road, Made in China 2025, and Thousand Talents Program in play, which spur companies and individuals to carry out its bidding, China aims to steal its way to a China-controlled global technological infrastructure, including a 5G network. China pursues large-scale acquisition of foreign companies in sensitive sectors and pressures companies into transferring technology. Finally, China’s Military-Civil Fusion strategy seeks to translate cutting-edge technology into advanced weapons.

Here I must note: some U.S. companies have voiced ethical qualms about working with DoD to develop advanced technology, in some cases even terminating relationships – often while continuing to work with China. DoD takes ethical considerations extremely seriously when researching and developing emerging technologies, and our efforts improve performance and allow human beings to make better decisions. China, on the other hand, repeatedly demonstrates little regard for international ethical rules and norms.

China’s approach to technological advancement matters for our military advantage, and its ambitions threaten the security of critical U.S. capabilities and technological infrastructure, and thus our military operations, safety, and prosperity.

Let me be perfectly clear: the United States does not oppose competition, as long as it takes place on a fair and level playing field. However, we cannot accept the unfair and illegal actions

of others who intend to tilt the playing field through predatory economics and underhanded tactics.

Undermining the Rules-based International Order

We all know China's population is comparable to the Americas and Western Europe's combined. But China is also geographically situated within arm's reach of 2.4 billion people, roughly a third of the earth's population, across Southeast Asia, Japan, and India. Make no mistake – China is extending that reach by increasing its overt military and coercive activities vis-à-vis its neighbors.

China's increasingly provocative behavior in the Indo-Pacific, particularly the South China Sea (SCS), should concern us all. Between 2013 and 2018, China increased its air and sea incursions into the SCS twelvefold. Within those five years, it also increased deployments of offensive and defensive weapons systems to the SCS by the same order of magnitude.

China's land reclamation and militarization far exceed that of other claimants combined in the South China Sea. Between 2013 and 2015 alone, China created more than 3,200 acres in the SCS, building features within its self-proclaimed 'nine dash line' – a claim the Permanent Court of Arbitration in The Hague ruled in 2016 has no legal basis. These constructed features are almost four times the size of Central Park in New York City and roughly five times the size of this Capitol Hill neighborhood. Imagine walking from this hearing room to the Marine Barracks at 8th and I over what used to be part of the Pacific Ocean.

Now also picture Chinese interference in freedom of navigation. Yet for this, we do not have to use our imaginations. China habitually threatens this freedom, using both conventional military force projection and "gray zone" or irregular warfare activities. For example, in September, Chinese military vessels came dangerously close to the *USS Decatur* off the coast of the Spratly Islands. China's force projection inside and outside the SCS disrespects and undermines our rules-based international order and threatens regional stability and security.

International Network of Coercion

Lastly, China is diligently building an international network of coercion through predatory economics to expand its sphere of influence. Sovereign nations around the globe are discovering the hard way that China's economic "friendship" via One Belt, One Road can come at a steep cost when promises of investment go unfulfilled and international standards and safeguards are ignored.

Let us look at just a few examples. Saddled with predatory Chinese loans, Sri Lanka granted China a ninety-nine-year lease and seventy percent stake in its deep-water port. The Maldives owes China roughly \$1.5 billion in debt – about thirty percent of its GDP – for construction

costs. Pakistan owes China at least \$10 billion in debt for the construction of Gwadar Port and other projects.

In Africa, Djibouti owes China more than eighty percent of its GDP and, in 2017, became host to China's first overseas military base. In Latin America, Ecuador agreed to sell eighty to ninety percent of its exportable crude oil to China through 2024 in exchange for \$6.5 billion in Chinese loans. And after leasing land tax-free to China for fifty years, Argentina is denied access and oversight to a Chinese satellite tracking station on its sovereign territory, unwittingly allowing the facility's use for military purposes.

The list of nations entrapped by China's predatory debt tactics runs long, and some have started to push back. Yet, under the guise of good-intentioned development, Beijing continues to leverage debt for economic or political concessions – a practice we expect will intensify as more nations prove unable to pay China back.

POLICY OBJECTIVES TO MEET THE CHINA THREAT

Left unaddressed, China's success in unfairly tilting the playing field in its favor has serious implications for our own military advantage. While we do not seek to contain China, we expect China to play by the rules, meeting the same standards to which the United States and all other nations are held. We will cooperate with China wherever and whenever possible, but we also stand ready to compete where we must to ensure our military's competitive advantage for decades to come.

As German Minister of Defense Ursula von der Leyen said last month in Munich, "our partnerships are not built on domination. They do not create political and economic dependencies." Our pursuit of many belts and many roads creates alternative options for nations unwilling to succumb to China's increasingly coercive methods.

As such, DoD's priority policy objectives are to outpace Chinese military modernization to deter future conflict, or win decisively should conflict occur; protect U.S. and partner research and development of advanced technology from rampant Chinese theft, and; maintain a free and open Indo-Pacific built on strong alliances and growing partnerships.

THE RUSSIA THREAT

China is not the only nation attempting to undermine U.S. interests and security to alter the international order in its favor. Despite having an economy smaller than that of the state of Texas, Russia, against the economic odds, seeks a return to great power status. Though it has not reached that goal, Russia is playing a weak strategic hand well by: (1) aggressively modernizing its military; (2) projecting military might beyond its borders; (3) intimidating its neighbors, including exploiting their energy dependence for strategic gain, and; (4) undermining other nations' sovereign democratic processes.

Military Modernization

Russia is aggressively modernizing its military to gain an asymmetric advantage over the United States and NATO. Russia plans to spend \$28 billion to upgrade and modernize each leg of its strategic nuclear triad by 2020, and has already spent more than ten percent of its total military budget every year since 2011 on nuclear modernization efforts. In March 2018, Russian President Vladimir Putin announced Russia's development of six new strategic weapons systems – five of which are nuclear capable – including hypersonic systems able to maneuver at ten times the speed of sound and intended to circumvent U.S. missile defense capabilities. One of those hypersonic systems is expected to enter service this year.

In addition to modernizing its strategic weapons systems and delivery platforms, including its submarine fleet, Russia is building a large, diverse, and modern set of non-strategic systems, including the dual-capable SSC-8 cruise missile, which clearly violates the Intermediate-Range Nuclear Forces (INF) Treaty. Every NATO Ally agrees on this point and supports our decision to suspend U.S. Treaty obligations in response to Russia's material breach. A treaty not followed by all parties cannot be an example of effective arms control. For any who doubt U.S. efforts to bring Russia back into compliance with the Treaty, I would emphasize: we held over thirty meetings with the Russians at every level of government for more than five years – across two administrations, one Democrat and one Republican.

Moving to space, Russian systems are intended to disrupt, degrade, and damage U.S. satellites in orbit. There is no question: Russia treats space as a warfighting domain to gain military advantage over the United States. Moscow has already fielded ground-based directed energy laser weapons and is developing air-based systems and additional novel counterspace capabilities to target our space-based missile defense sensors. Russia now has the third largest collection of operational satellites in the world, behind only us and China.

Projecting Military Power

On top of modernizing its military capabilities, Russia also projects its military might around the globe. In 2018, Russia conducted its largest strategic military exercise since 1981. Today Moscow deploys a variety of aviation and naval missions to the Pacific, the Arctic, the Mediterranean Sea, the Indian Ocean, and the western hemisphere, including the Caribbean. In December, Russia conducted landing and overflight operations in our own front yard, sending bombers to Venezuela. In the Middle East, it has continued support for Syria's murderous regime with expeditionary operations and long-range strikes. These examples make clear Russia's ambitions for a more globally dominant military footprint.

Strategy of Intimidation

In addition to projecting military power far beyond its borders, over the last decade Russia has attempted to incrementally push geographic boundaries with its neighbors. From its 2008

invasion and continued occupation of twenty percent of Georgian territory to its 2014 invasion and continued occupation of Crimea, Russia demonstrates blatant disregard for other nations' sovereignty. Lest we forget, Russia still holds twenty-four Ukrainian crewmembers it captured last November, when it attacked three Ukrainian ships near the Sea of Azov in violation of international law.

Russia's escalating intimidation efforts are amplified by irregular warfare and "gray zone" tactics intended to sow confusion, conceal military movement, and limit accountability. By deploying mercenaries – like those of the Wagner Group to places like Crimea, Syria, Libya, and now Venezuela – instead of uniformed soldiers, Russia hopes its use of proxies will further muddy the already murky waters of conflict and limit international response to its actions. Russia's attempts at deception are not fooling anyone.

Undermining Sovereign Processes

Russia's duplicity also extends to the cyber domain, where it propagates coordinated disinformation campaigns to undermine sovereign democratic processes. In April 2018, Facebook estimated that roughly one million users followed a page operated by Russia's Internet Research Agency (IRA). Last year, Twitter identified more than 3,800 IRA accounts that had generated millions of tweets over a nine-year span. These accounts are intended to foster divisiveness in the West and undermine trust in democratic institutions.

Russian efforts extend beyond their bots and internet trolls – they conduct deliberate cyber operations against the United States and other sovereign nations. To name a few examples of Russian handiwork: it has targeted U.S. government and critical systems to allow damage or disruption of U.S. civilian or military infrastructure during a crisis; launched distributed denial of service attacks against NATO, Ukraine, and German government websites, and; released a potent cyber virus that caused billions of dollars in damage around the world.

In response, we are not complacent. DoD is getting after the problem, and we are achieving results, most notably in our recent successful efforts to stymie Russian disruption of our midterm elections. We are determining what other actions DoD and our Interagency partners must take to ensure the continued safety and integrity of our democratic institutions.

POLICY OBJECTIVES TO MEET THE RUSSIA THREAT

As these examples make clear, Russia is intent on undermining U.S. military advantage to alter the existing balance of power in its favor. In order to thwart Russia's efforts to regain peer competitor status, DoD is focused on modernizing our military to enhance deterrence and prevent future conflict, while bolstering burden sharing to ensure the NATO Alliance remains credible and capable against Russian aggression.

We are also working diligently with the Interagency, our allies, and our partners to deter Russia's physical intimidation and contest its cyber aggression, information warfare, and "gray zone" tactics in Syria and beyond. That includes ensuring Russia does not control the international narrative, casting its malign intentions and actions under a cloak of subterfuge, disinformation, and malign propaganda. We are strengthening our ability to counter this deliberate deceit, both on our own and with our allies and partners.

REGIONAL THREATS: NORTH KOREA & IRAN

As DoD modernizes to win competition with China and Russia, we also remain alert to regional threats, like those posed by the Iranian and North Korean regimes.

While President Trump and our diplomats negotiate for the denuclearization of North Korea, its collection of nuclear weapons and ballistic missiles continues to pose a threat to the U.S. Homeland, as well as our allies.

Iran, for its part, relentlessly seeks to expand its malign influence across the Middle East and beyond. By providing conventional manpower and support to the Syrian regime and Houthi rebels in Yemen, and offering support and financing to terrorist groups like Lebanese Hezbollah, Iran is entrenching and proliferating its clout across the region. In addition, Iran demonstrates reckless behavior in the maritime domain. Iranian leaders repeatedly threaten to close the Strait of Hormuz – the gateway for almost a third of all global sea-traded oil – to international shipping and allow Iranian-backed Houthis to conduct attacks on international shipping in the Bab al-Mandab.

Iran has also increased funding for its cyber efforts twelvefold under President Rouhani, as well as increased espionage and targeting of U.S. government and commercial entities since withdrawing from the Joint Comprehensive Plan of Action. DoD also remains closely attuned to the threat of Iran pursuing nuclear weapon and advanced missile capabilities, including Iran's testing of space launch vehicles with technology virtually identical and interchangeable with that of ballistic missiles.

POLICY OBJECTIVES TO MEET REGIONAL THREATS

In support of the ongoing negotiations for the denuclearization of North Korea, DoD aims to ensure our diplomats continue to speak from a position of strength. Our alliances in the region remain ironclad, including with the Republic of Korea and Japan. Together we deter North Korean aggression and maintain our ability to protect the Homeland and win decisively should conflict ever occur.

To counter Iran's destabilizing influence across the Middle East, DoD seeks to deepen and expand alliances in the region and strengthen local partners' capabilities and capacity to manage and counteract threats. We also seek to ensure freedom of navigation for all, bolster resilience

against destructive cyber-attacks, and prevent weapons of mass destruction (WMD) from falling into the hands of irresponsible actors.

THE TERRORISM THREAT

Working by, with, and through an expansive network of international partners, we have made meaningful progress in thwarting terrorist designs against the U.S. Homeland and interests. Yet we do not discount the threats that continue to emanate from violent extremist organizations (VEOs), as they seek to conduct and inspire attacks, gain legitimacy by exerting control over territory, enjoy safe haven in under-governed countries, obtain access to WMD material, and proliferate their ideology to others across the globe.

Taking a step back from our hard-won successes against the Islamic State in Iraq and Syria (ISIS), we also recognize the global fight against radical Islamist terrorists is not over. From the 1980s to now, the number of nations, either unwittingly or willingly, providing safe haven to VEOs has increased eleven-fold. Today, radical Islamist terrorist movements are organized in more than two dozen countries, and the globe must contend with more than one hundred VEO-directed, enabled, or inspired attacks every year. VEOs continue to take advantage of instability in places like Yemen, Syria, Libya, Iraq, the Maghreb, Lake Chad, Somalia, and Afghanistan, preying on the conflict-ridden to grow their influence.

POLICY OBJECTIVES TO MEET THE TERRORISM THREAT

Recognizing terrorism as a global threat, we must pursue global solutions that utilize the unique capabilities and capacities of our allies and partners, in addition to our own. Military might alone will not eliminate terrorist ideology or the threat of future terrorist attacks.

However, we can and are reducing the likelihood of an attack on our Homeland, our troops, and our interests by contributing to a whole-of-government and coalition approach. Together, we are removing terrorists' ability to control and hold territory; bolstering the internal security and stable governance of vulnerable states; ensuring the proper safeguarding of WMD material from terrorist hands; checking their ability to exploit emerging technologies, including unmanned systems; targeting VEO financial networks and countering terrorist ideology online to limit its spread to the greatest extent possible; and sharing intelligence to limit the risk of attack around the world.

WHAT DoD IS DOING ABOUT IT

To meet our policy objectives, DoD cannot simply keep pace with our competitors as they increase their regional and global influence, grow their military capabilities, and develop and field advanced technologies. We must – and will – significantly outpace them.

We have made tough choices that align finite resources with our strategic priorities, reducing some day-to-day operational requirements now so we are prepared to deter, compete, and win against strategic competitors in the future. Our work bringing the NDS to life is far from over, but we are demonstrating clear progress along our three lines of effort.

Increasing Lethality

In order to protect the Homeland and remain the most lethal military in the world, we have begun a paradigm shift towards a more balanced, distributed, survivable, and cost-imposing Joint Force. In 2018, we closely linked our combatant commands' operations to policy objectives and our Service plans to capability and capacity, with a focus on execution and performance. We are adjusting our posture, increasing lethality, improving operational readiness, and beginning to modernize and innovate at scale. These efforts allow us to better exploit adversary weakness, project power in contested environments, and expand our combat credible forward presence.

We have shifted our posture in key regions, taking initial steps to economize for sustainable missions in the Middle East and South Asia to prepare for the possible high-end fight of the future. In doing so, we maintain strategic predictability and implement operational unpredictability via the Dynamic Force Employment (DFE) model. This approach provides assurance to our allies and partners, while keeping our competitors and adversaries on their toes. We demonstrated DFE in action last year, when one of our carrier strike groups returned early from deployment unannounced and quickly redeployed to the North Atlantic – the first carrier strike group to conduct operations there since the 1990s.

We encourage and welcome all individuals who can meet our exacting requirements to join our military's ranks. A key element of strengthening our military and increasing lethality is ensuring our warfighters achieve established physical, mental, and security vetting standards. War is unforgiving, and our mission demands we remain a standards-based organization. In upholding systematically applied standards, we ensure the readiness of our Joint Force and cohesion of our units. One of those standards is deployability. Since June, we have lowered the percentage of non-deployable Service Members from 6.4 to 5.4 – that means roughly 21,000 fewer non-deployable Service Members today than eight months ago.

DoD has also worked diligently to ensure our personnel have the capacity, training, and capabilities they need to achieve results. Last year, we accelerated delivery of more than 14,000 munitions and precision guidance kits to our warfighters, turned the corner on replenishing critical munitions stockpiles, and made strides to rapidly deploy cutting edge equipment to the warfighter. Our Close Combat Lethality Task Force continues to strengthen our infantry's lethality, survivability, resiliency, and readiness for close combat. Four out of five U.S. combat deaths occur in our infantry. Therefore, it is a strategic imperative to ensure those who confront war's grimmest realities never enter into a fair fight.

This work on personnel and munitions readiness feeds into complementary efforts to increase equipment readiness. In October 2018, we set an eighty percent readiness target for mission critical aviation platforms. In just a few months, almost every type, model, and series of aircraft targeted by that memorandum has demonstrated progress. This year, we will establish similarly ambitious readiness targets across the DoD enterprise. In addition, our Services have made impactful readiness gains. As one example, the Air Force's operational squadrons are twenty-three percent more ready today than in 2017, and we will have twenty-five percent more pilots able to carry out missions in FY2019 than in FY2016.

On modernization, we remain committed to a safe, secure, and effective nuclear deterrent. Nuclear deterrence has kept the peace over the last seventy years, and its importance has been reaffirmed by every Congress and every president since Harry Truman. Last year, DoD released our Nuclear Posture Review (NPR), which details the need for modern and tailored nuclear capabilities and capacity that meet the realities of our times. We are moving out on those efforts. With FY2019 funding, we are recapitalizing and modernizing our aging legacy forces, including our nuclear command, control, and communications (NC3), while pursuing prudent, modest adjustments to our arsenal, which will increase the flexibility of our response options.

Here it is worth re-stating – Russia is aggressively developing and modernizing a suite of strategic and non-strategic nuclear weapons. Not only does this add urgency to the modernization of our legacy forces, it underscores the importance of the supplemental capabilities called for in last year's NPR. Both the low-yield submarine-launched ballistic missile (SLBM) and the sea-launched cruise missile (SLCM) close what we believe to be troubling gaps in regional deterrence. These are not redundant capabilities. The low-yield SLBM, deployed in small numbers, will provide a highly tailored response to specific developments in Russia's forces and doctrine that may lead Russia to mistakenly believe it could potentially use a small number of low-yield nuclear weapons without risking a U.S. military response. A nuclear SLCM will provide a similar capability in response to serious developments and trends in Russia's nonstrategic nuclear forces. These supplemental capabilities enhance deterrence and stability.

Turning to emerging technology fields, DoD has identified ten key areas: hypersonics; fully networked C3; directed energy; cyber; space; quantum science; artificial intelligence (AI)/machine learning; microelectronics; autonomy; and biotechnology.

We have invested in basic research, rapid prototyping, and experimentation to mature technology that can be used at scale. We are also updating our warfighting doctrine as the character of warfare changes. Take AI for example – competitors are investing heavily in this field, redefining the future of warfare. Last year, DoD established the Joint AI Center (JAIC), and we released our AI Strategy just last month. These efforts accelerate DoD's delivery and adoption of AI at the speed of relevance, while attracting and cultivating the best global talent.

In pursuit of stronger missile defense, DoD released our Missile Defense Review (MDR) in January, which recognizes the accelerating proliferation of advanced offensive missile capabilities around the world. The MDR articulates a comprehensive approach that combines deterrence, active and passive missile defense, and attack operations. We continue to maintain ground- and sea-based missile defenses while also developing new capabilities to counter new threats.

As the MDR illustrates, our military is not constrained by earth's geography. We are taking steps to secure unfettered access to and freedom to operate in space, in accordance with our international agreements and obligations. Reforming the organization of the military space enterprise is fundamental for protecting our roughly \$19 trillion economy and our position as the world's strongest military. Earlier this month, we submitted a legislative proposal to Congress, requesting authorization for a U.S. Space Force. If authorized, the Force would transform our approach to space, increasing our responsiveness in this warfighting domain. Establishing a sixth branch with dedicated military leadership will unify, focus, and accelerate the development of space doctrine, capabilities, and expertise to outpace future threats, institutionalize advocacy of space priorities, and further build space warfighting culture. I ask for your support of our proposal, so we can move out in this critical domain.

We recognize restoring military readiness, modernizing our Joint Force, and increasing lethality will not happen overnight, but as the above examples demonstrate, we are making meaningful progress.

Strengthening Alliances and Partnerships

Beyond DoD's efforts to improve readiness and lethality, we are expanding collaboration and cooperation outside the Department. DoD's participation in combined military exercises has increased by seventeen percent in the last two years, and our Foreign Military Sales have increased by more than sixty-five percent in the last three years. Across the globe, DoD has leveraged opportunities to expand and deepen our already unmatched network of allies and partners, while making real progress on burden sharing for international security.

Starting in the Indo-Pacific, our priority theater, we continue to pursue many belts and many roads by keeping our decades-old alliances strong and fostering growing partnerships. In all our actions, we demonstrate our commitment to a free and open region, marked by respect for the sovereignty and territorial integrity of all nations, big and small.

We are fortifying our bedrock alliances with Australia, Japan, the Republic of Korea, the Philippines, and Thailand while growing key partnerships across the Indo-Pacific. It is worth noting here that four out of the five nations in our Five Eyes intelligence-sharing network are also Pacific nations, further emphasizing the region's importance.

In 2018, the United States took historic strides with two key partners in particular, Vietnam and India. Our Navy conducted the first U.S. aircraft carrier visit to Vietnam since the Vietnam War, and we participated in the inaugural U.S.-India 2+2 Strategic Dialogue in New Delhi, showing growing trust between the world's oldest and largest democracies.

While our diplomats chart a path to the denuclearization of North Korea, DoD continues to enforce United Nations Security Council resolution sanctions against North Korean ship-to-ship transfers, alongside allies and partners. We have also improved integration of our missile defense assets on the Korean Peninsula to better protect U.S. Forces and allies.

In July 2018, we conducted the largest naval exercise in the world, the Rim of the Pacific or RIMPAC, alongside twenty-five other nations. That and our Southeast Asia Maritime Security Initiative have boosted interoperability and increased our allies and partners' ability to conduct maritime security and awareness operations on their own. Our efforts across the region have enabled our allies and partners to take a tougher stand against Chinese aggression in international waters. For example, this past year France, the United Kingdom, Japan, Canada, Australia, and New Zealand all increased their presence in the East and South China Seas, reiterating our collective stance to fly, sail, and operate wherever international law allows.

In Europe, the United States is fortifying relationships, realizing burden sharing gains, and developing a more lethal, combined capability. This year, NATO – the most successful Alliance in history – marks its seventieth anniversary as the bedrock of transatlantic security. NATO is poised to bolster deterrence through larger and more frequent exercises, mobility and infrastructure improvements, a revamped command structure, and increased force presence in territories most vulnerable to Russian aggression. We are rapidly pursuing our “Four Thirties Readiness Initiative” by 2020: thirty mechanized battalions, thirty air squadrons, and thirty combat vessels ready to fight within thirty days or less.

Over the last two years, NATO has made significant burden sharing progress, both financially and operationally. Since 2017, our NATO Allies have increased their defense spending by \$41 billion. The nine percent increase from 2016-2018 represents the largest in a quarter century. By 2020, NATO projects Allies will increase defense spending by \$100 billion. These are impressive numbers. Yet NATO contributions do not all boil down to simple dollar amounts. The Alliance continues to provide valuable manpower, specialized capabilities, and territory that no other partnership in the world can match.

I now move to the impactful work we are doing by, with, and through our allies and partners across the Middle East and South Asia.

In Syria and Iraq, the United States, as part of the seventy-nine-member Defeat-ISIS Coalition, and our local partners have liberated more than thirty towns and cities from ISIS control since January 2017 – that's virtually all of the territory ISIS once held.

As we look ahead in Syria, we will continue to stand with those who fought and continue to fight alongside our Coalition, address Turkey's security concerns along Syria's northeast border, maintain the global Defeat-ISIS Coalition, and set conditions for continuing U.S. counterterrorism operations in the region. We fully support the Government of Iraq in its fight against terrorism and will continue to enable the Iraqi Security Forces' progress in securing liberated areas and thwarting ISIS attempts to mount a clandestine insurgency.

In Afghanistan, we are executing President Trump's South Asia Strategy, R4+S (regionalize, realign, reinforce, reconcile, and sustain). In applying military pressure on the Taliban, we support Ambassador Zalmay Khalilzad and Secretary Pompeo's ongoing negotiations, which are Afghanistan's first chance for real peace in forty years. We are also applying maximum pressure on ISIS-Khorasan (ISIS-K) and other terrorist groups in Afghanistan, to stymie any threats to the U.S. Homeland.

Since 2016, our allies and partners have stepped up to create necessary conditions for negotiations. Afghan forces now lead one hundred percent of missions, with U.S. and coalition personnel performing train, advise, and assist roles. In 2018, international partners agreed to extend their roughly \$1 billion in annual financial sustainment of Afghan forces through 2024. NATO's fulfillment of requirements in Afghanistan has increased more than fourteen percent since the introduction of President Trump's South Asia Strategy, its highest level in the Mission's history. Since 2016, the number of non-U.S. Coalition troops to NATO's Resolute Support Mission has increased by more than thirty-five percent, and two new countries, Qatar and the United Arab Emirates, are formalizing their status as operational partners.

Defeating Al Qaeda in the Arabian Peninsula (AQAP) and ISIS remains the United States' top national security interest in Yemen. At the same time, we fully support UN Special Envoy Martin Griffiths's efforts to bring all relevant parties of the civil war to the negotiating table. I am encouraged by the ceasefire in the strategically-important city and port of Hudaydah. Though not easy, these are necessary first steps on the path to lasting peace.

In Africa, we are helping partners build their security forces' capacity to counter terrorist and other transnational threats, bolstering relationships to ensure U.S. influence and access against great power competition, enhancing our ability to conduct crisis response, and supporting whole-of-government efforts to advance stability and prosperity.

The last stop in our abbreviated walk around the world is closer to home – to our allies and partners in the western hemisphere and our efforts to protect our southern border. Over the last year, we have fostered strong military-to-military ties with our Canadian and Mexican neighbors, while bolstering relationships with Brazil, Argentina, Colombia, and Chile. We appreciate and applaud these nations' contributions to international security, demonstrated notably last year when Chile served as the Combined Forces Maritime Component Commander at RIMPAC – the first time in the exercise's history a non-English speaking nation has done so.

As we continue to monitor the situation in Venezuela, we are working closely with the Department of State, U.S. Agency for International Development, and regional partners to provide humanitarian assistance, while maintaining our posture to protect our national interests and citizens abroad.

On the southern border – last month, I visited the El Paso area to assess the security situation and DoD's role in supporting our Department of Homeland Security partners.

As these myriad examples illustrate, our thriving, global constellation of alliances and partnerships provides an asymmetric advantage no competitor or adversary can match. We take that advantage seriously, and we continue to foster its growth at every opportunity.

Implementing Reform

Let me now turn inward – to reform of our internal business practices. Over the last year, we have made marked improvements to our fiscal transparency, instituting a wide range of reform initiatives that bolster efficiency, effectiveness, and performance.

We have focused reform in key areas, including healthcare, contract management, information technology (IT), acquisition, civilian resource management, and financial management. Let me provide a brief overview of our progress so far. Over the course of FY2017 and FY2018, we have saved \$4.7 billion from reform across our headquarters' activities – a down payment on more to come.

On healthcare, we realized savings of almost \$519 million in TRICARE reform, with \$3.4 billion in savings planned through FY2021. Our entire Fourth Estate has now participated in contract service requirement reviews to eliminate unnecessary contracts, resulting in \$492 million in programmed savings.

Within the IT field, we modernized our defense travel system, trimming our regulation by almost 1,000 pages. The reform allows for better industry competition and has saved nearly \$160 million to date. Within acquisition reform, our Services saved more than \$550 million in FY2017 and FY2018 by selling equipment to foreign partners and negotiating multi-year procurements over single year contracts.

And within financial management, DoD completed our first-ever consolidated financial statement audit in 2018, covering roughly \$2.7 trillion in assets. As of February 1, DoD had developed corrective action plans to address more than thirty-three percent of the total audit findings and recommendations, with many more corrective actions to come.

In addition to business reform, the Department has also made important structural reforms, including elevating U.S. Cyber Command to full combatant command status, standing up U.S. Army Futures Command, and finalizing our split of the Acquisition, Technology, and Logistics

office into two separate offices: Acquisition and Sustainment (A&S) and Research and Engineering (R&E).

The Way Ahead

Our Department has been busy, but we are just getting started. I am encouraged by our initial progress. Focus and discipline are vital for our NDS's continued execution.

OUR FY2020 REQUEST: A STRATEGY-DRIVEN BUDGET

Our FY2018 funding stopped the erosion of our competitive edge by beginning to restore military readiness. Our FY2019 funding continued readiness gains and made key down payments on a more lethal military. Now our Department needs adequate, sustainable, and predictable funding to maintain momentum and expand our modernization and readiness efforts. Every line of our FY2020 request is designed to implement our Strategy. Therefore, every dollar of it – both in baseline funding and overseas contingency operations – is critical. I ask for Congress's support for on-time funding of our \$750 billion topline for National Defense, so we can continue to breathe life into the NDS.

Our strategy-driven budget drives further progress along our three lines of effort and brings our military modernization efforts to life at the speed of relevance. It enables critical shifts to compete, deter, and win in any high-end fight of the future, while preserving capabilities to support current operations. With this funding, we ensure America maintains our asymmetric military advantage with a more lethal, agile, and innovative Joint Force.

The FY2020 request includes the largest research, development, test, and evaluation (RDT&E) budget in seventy years, when adjusted for inflation. That is \$104 billion in total requested funds for FY2020 – \$9 billion more than what we will spend this fiscal year. We have made strategic choices to prioritize lethality for the high-end fight.

Across DoD, these choices move our capabilities from cost-accepting to cost-imposing, from the exquisite and purely survivable to the affordable and attritable. Through targeted investment, we will replace a federated approach with an enterprise one, enabling a more distributed, scaled path to innovation and modernization. This path prioritizes unmanned and machine capabilities, as well as the ability to “fight in the dark” without network dependency.

With that broader context in mind, I will now focus on four priority areas: (1) Investing in the contested space and cyber domains; (2) modernizing in traditional air, maritime, and land domains, as well as multi-domain enterprises; (3) innovating in emerging technology fields to strengthen our competitive edge, and; (4) building on readiness gains to meet requirements for our current operational commitments and future challenges.

Space and Cyber Investments

Our request recognizes the critically important role space will play in maintaining military superiority in the future. The \$14.1 billion dedicated to space will counteract the erosion of our competitive advantage by enhancing our existing space-based capabilities, like GPS, satellite communications, and missile warning, as well as increasing launch capacities. We will also stand up the U.S. Space Force Headquarters, U.S. Space Command, and Space Development Agency to best prepare DoD to assure freedom of operation in space, deter attacks, and when necessary, defeat space and counter space threats to the United States, our allies, and our partners.

We also note the cyber domain's crucial role, both now and in warfare's future. That is why we have requested \$9.6 billion to support offensive and defensive cyberspace operations, shore up network resiliency against adversaries, and improve our cyber posture. These efforts help ensure DoD has the information and communications technology capabilities necessary for implementing our NDS and realizing our mission.

Traditional and Multi-Domain Investments

The FY2020 budget will ensure the U.S. military maintains long-term competitive advantage on land, in the air, and on the sea. Across these three traditional domains, we are investing a total of \$107 billion for modernization.

In the air domain, this includes \$57.7 billion to increase the procurement and modernization of our fighter force. A balanced mix of fourth and fifth generation aircraft will effectively and affordably meet the entire spectrum of NDS missions, providing the stealth needed to gain air superiority, execute precision strikes, and conduct stand-in electronic attack against peer competitors in highly-contested environments, while also providing counter-air and strike in more permissive environments. We will also purchase additional tankers, Advanced Medium-Range Air-to-Air missiles, and Joint Air-Surface extended range missiles.

On land, we will invest \$14.6 billion to fund roughly 6,400 combat and tactical vehicles, including M-1 Abrams upgrades and Amphibious Combat Vehicles, as well as multiple combat systems that provide overmatch on the last two hundred meters of the battlefield.

In the maritime domain, we will increase and diversify our strike options, including offensive-armed unmanned surface and underwater vessels and advanced long-range missiles. FY2020 funds will also accelerate fleet growth, delivering more ships faster, including cutting edge unmanned variants.

The FY2020 request also invests \$14 billion in modernizing and recapitalizing all three legs of our nuclear capabilities, to include the Ground-Based Strategic Deterrent system, Columbia-class ballistic missile submarine, Long-Range Standoff Weapon, B-21 bomber, life-extended

Trident SLBM, and the F-35 dual-capable fighter aircraft; while also enhancing our missile warning and NC3 capabilities.

We also slate \$13.6 billion for missile defeat and defense modernization, increasing the capability and capacity of our ground-based defenses, Terminal High Altitude Area Defense, and Aegis Ballistic Missile Defense systems; enhancing our space-based missile warning and other capabilities to address hypersonic threats; and developing boost-phase missile defense systems, including directed energy and air-launched kinetic interceptors.

Also on the multi-domain front, we will invest \$3.4 billion for our Special Operations Forces. The FY2020 request refocuses on strategic competition by increasing funding for research and development, modernization, and expanded capabilities for the high-end fight, while maintaining irregular warfare as a core competency.

Innovation and Advanced Technology Investments

With more than \$7.4 billion directed toward DoD's development and fielding of technologies focused on the high-end fight, the FY2020 budget prioritizes funding across four key emerging areas: autonomy, AI/machine learning, hypersonics, and directed energy.

Let me expand on hypersonics for a moment as one example. Without the long-range, survivable, and fast strike capability of hypersonic weapons, it will be difficult for our military to maintain access to key regions or come to the defense of allies and partners in a crisis or war. Yet, with the \$2.6 billion requested in FY2020, projected doubling of funding requests in coming years, and close inter-service cooperation, we are accelerating pursuit of options deliverable from land, sea, and air, with some capabilities expected to deploy to the warfighter three years earlier than previously planned.

Sustainment and Readiness Investments

This budget sustains our Joint Force and builds on critical readiness gains. We will invest almost \$125 billion in operational readiness and sustainment, including \$1.5 billion for advanced training facilities and ranges, \$2.6 billion for improving and expanding cyber operations training, and \$41.2 billion for further improving tactical aviation readiness.

In addition, the FY2020 budget will allow an increase to our total end-strength by roughly 7,700 Service Members over the projected FY2019 level, as well as give our men and women in uniform a much-deserved 3.1 percent pay raise, the largest in a decade.

In concert with the funding priorities I have just outlined, we will continue to pursue opportunities that balance capacity and capability by realizing economies of scale in large equipment acquisitions, like aircraft carriers and the F-35 Joint Strike Fighter. As we do so, we will continue to assess the utility of our investments through a lifecycle lens.

CONCLUSION

With Congress's support and delivery of on-time funding at our requested topline, this budget ensures our military maintains the lethality, adaptability, and resiliency necessary to compete, deter, and win against any adversary in an increasingly dangerous world.

It is a privilege and honor to lead the most lethal military in the world. I thank those in uniform and their families for all they do, today and every day, to keep us safe, and I appreciate the critical role Congress plays to ensure our warfighters are ready to succeed on the battlefields of today and tomorrow.

The men and women of the Department of Defense stand ready, as always, to protect liberty and freedom.

Thank you.

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Patrick M. Shanahan
Acting Secretary of Defense

Patrick M. Shanahan became the Acting Secretary of Defense on January 1, 2019. Prior to this assignment, he served as the 33rd Deputy Secretary of Defense, appointed on July 19, 2017.

Mr. Shanahan previously served as Boeing senior vice president, Supply Chain & Operations. A Washington state native, Mr. Shanahan joined Boeing in 1986 and spent over three decades with the company. He previously worked as senior vice president of Commercial Airplane Programs, managing profit and loss for the 737, 747, 767, 777 and 787 programs and the operations at Boeing's principal manufacturing sites; as vice president and general manager of the 787 Dreamliner, leading the program during a critical development period; as vice president and general manager of Boeing Missile Defense Systems, overseeing the Ground-based Midcourse Defense system, Airborne Laser and Advanced Tactical Laser; and as vice president and general manager of Boeing Rotorcraft Systems, overseeing the Apache, Chinook and Osprey.

Mr. Shanahan is a Royal Aeronautical Society Fellow, Society of Manufacturing Engineers Fellow and American Institute of Aeronautics and Astronautics Associate Fellow. He served as a regent at the University of Washington for over five years.

Mr. Shanahan holds a Bachelor of Science degree in mechanical engineering from the University of Washington and two advanced degrees from the Massachusetts Institute of Technology: a Master of Science degree in mechanical engineering, and an MBA from MIT's Sloan School of Management.

HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

GENERAL JOSEPH F. DUNFORD, JR., USMC

19TH CHAIRMAN OF THE JOINT CHIEFS OF STAFF

DEPARTMENT OF DEFENSE BUDGET HEARING

MARCH 26, 2019

Chairman Smith, Ranking Member Thornberry, distinguished members of this committee, it is an honor to join Acting Secretary Shanahan and the Honorable David Norquist in testifying before you today. It remains my distinct privilege to represent the Soldiers, Sailors, Airmen, and Marines of the United States Armed Forces.

Today, I can assure the committee that the United States military can defend the Homeland, meet our Alliance commitments, deter nuclear attack from any state actor, and effectively respond should deterrence fail. We have a competitive advantage against any adversary across all domains—air, sea, land, space, and cyber—and we can project power to advance the interests of the United States anywhere around the globe.

But that competitive advantage has eroded. This is the result of seventeen years of continuous combat against transregional violent extremism and the damaging effects of funding instability. China and Russia have capitalized on our distraction and our constraints. They have invested in capabilities specifically designed to challenge our traditional sources of strength and have sought to undermine the rules-based international order that brought prosperity and relative peace for the last seven decades.

With your help, starting in 2017, we arrested the erosion of our competitive advantage. Appropriations in fiscal years 2017-2019 allowed us to restore readiness and invest in new capabilities while meeting our ongoing commitments across the globe. However, we cannot undo decades of degradation in just a few years. This year's budget allows us to continue to restore our competitive advantage by enhancing our readiness and lethality.

STRATEGIC ENVIRONMENT

Today's strategic environment is extraordinarily complex and volatile. The National Defense Strategy (NDS) characterizes and prioritizes our strategic challenges with a "2+3" framework that names China and Russia as the primary challenges with which we must contend, along with North Korea, Iran, and violent extremism. This framework provides a benchmark against which we can measure our capabilities. It is not intended to be predictive of future crises or armed conflicts; rather, it is an important tool for planning, managing risk, and developing capabilities. Our assumption is that if we build a Joint Force with the capabilities and capacities to meet these

challenges, either individually or in some combination, we will be well-positioned to respond to whatever threats the future holds.

China. China has paired its rapid economic growth with substantial military investment as it strives for regional hegemony and global influence. By investing heavily in the space and cyber domains while expanding air and maritime capacity and militarizing disputed land formations, they are developing the ability to deny us access to the East and South China Seas. The intended effect is to weaken our alliance structure in the Pacific and allow Beijing to rewrite the norms, standards, and laws in the region. They are also advancing their interests globally through the One Belt One Road Initiative, creating exploitive economic relationships across Asia, Africa, and Latin America. These relationships can be leveraged to reduce our influence and the access we need to project military power.

Russia. Similarly, Russia has invested in asymmetrical capabilities where they perceive they have a competitive advantage. They are using information, cyber, and unconventional operations combined with economic and political influence to advance their interests while seeking to undermine the credibility of NATO. We have seen examples of their revanchist behavior in the invasion of Georgia and Crimea, their ongoing activity in the Donbas, and the recent seizure of Ukrainian vessels near the Sea of Azov. We also saw their efforts to undermine democracy in 2016, both in Europe and the United States.

North Korea. While we remain hopeful for a peaceful denuclearization of the Korean Peninsula, after two summits between President Trump and Kim Jong-Un, it is clear that we must remain ready for multiple contingencies. We are still dealing with a country that has nuclear weapons and ballistic missiles that threaten our Allies in the region and our Homeland. Regardless of the expressed intent of the North Korean leader, that capability exists and we must retain the force posture to deter and defend against the threat.

Iran. Iran continues to project malign influence and present challenges with missile, cyber, proxy, and maritime capabilities. We also continue to monitor Iran's nuclear capability. The regime aims to establish itself as the dominant regional power; their military development is designed to restrict our access to their sphere of influence while their activities threaten freedom of navigation along important commercial routes, destabilize the government of Iraq, exacerbate civil wars in Yemen and Syria, and support proxies inside of Lebanon and Syria.

Violent Extremist Organizations. While we have made significant progress against ISIS, Al Qaeda, and affiliated groups, the threats to the United States and our Allies and partners remain. Violent extremism is a global, generational, society-level problem of which military operations can only manage the symptoms. In the meantime, we have implemented a fiscally, politically, and militarily sustainable counterterrorism campaign.

Our security, our prosperity, and the international system that makes them possible are threatened today by actors ranging from advanced and ascending militaries backed by nuclear arsenals to lone fighters inspired by radical ideologies. The Joint Force must respond by balancing the capabilities we need for today's operations with the depth, flexibility, and advanced technologies required to respond to the challenges of the future. If approved, the President's Budget 2020 (PB20) request will enable the Department to adapt the force we have today, while we design the force needed for tomorrow's challenges.

THE FORCE WE NEED TODAY

The Joint Military Net Assessment—a rigorous tool we use to evaluate the Joint Force's ability to meet its strategic objectives—identified challenges across all domains in the context of our near-peer competitors. Other assessments and strategic reviews have also highlighted the sustained investment we need to improve readiness, capabilities, and capacities in the Joint Force. The FY20 budget provides funding for current operations and, building on budgets of recent years, continues to build readiness and improve lethality by modernizing existing capabilities and expanding capacity.

Readiness.

We have realized readiness improvements through fundamental changes in our global force management processes. As directed in the NDS—and in support of its 2+3 strategy—we have implemented Dynamic Force Employment (DFE). This is a top-down process of prioritizing and allocating resources against our strategic priorities with bottom-up refinement from the Geographic Combatant Commanders.

DFE allows us to position resources globally to mitigate strategic risk and be operationally unpredictable while remaining strategically predictable. This improves our ability to respond to

unforeseen crises—as well as opportunities—and provide strategic flexibility for senior decision makers while maintaining readiness across the Joint Force.

Within this new framework for global force management, your men and women in uniform are operating across the globe every day to assure Allies and partners, deter adversaries, and assist local forces in combatting violent extremism at its sources. PB20 provides them the resources they need to accomplish their missions and return home safely.

Current Operations.

China. U.S. forces conduct freedom of navigation operations globally to challenge excessive maritime claims—including those made by China—and demonstrate our determination to operate wherever international law allows. In the South China Sea and elsewhere in the region, we also fly bomber missions, demonstrating a resilient global strike capability that checks Chinese ambition and assures our regional Allies and partners. Throughout the Pacific, our troops exercise and engage with partners to signal our commitment and counterbalance China's challenges to the rules-based order.

Russia. In Europe, the European Defense Initiative and associated posture adjustments and combined exercise programs represent the largest reinforcement of NATO's collective defense posture—and the largest demonstration of its interoperability—since the Cold War. U.S. personnel also contribute to NATO's integrated ballistic missile air defense in Europe. In both the Atlantic and Pacific, we conduct sustained air and sea operations to monitor Russian activities and deter any aggression.

North Korea. U.S. troops on the Korean Peninsula are postured and trained to deter North Korean aggression, provocation, and coercion. Their current priority is supporting the State Department-led maximum pressure campaign to achieve the full, final, and verifiable denuclearization of the Peninsula. In concert with like-minded nations, we have expanded our sea and air operations to deter and disrupt illicit ship-to-ship transfers of refined petroleum and other materials restricted by UN Security Council Resolutions.

Iran. U.S. forces conduct freedom of navigation operations in the Strait of Hormuz. We continue our commitment to the stability of the government of Iraq, and our efforts to build the capacity of

our regional partners. In these and other ways, the Joint Force complements U.S. diplomatic and economic efforts to counter Iranian malign influence in the Middle East.

VEOs. The United States has assembled a global coalition to counter violent extremist organizations—leveraging a relatively small footprint of U.S. forces to enable local partners throughout the world. The immediate priority is achieving the enduring defeat of ISIS in Iraq and Syria through Operation INHERENT RESOLVE. We are also working by, with, and through partners in every region to cut the “connective tissue” of foreign fighters, resources, and the ideological narrative that enable violent extremists to operate transregionally.

Iraq and Syria. U.S. troops remain engaged in the D-ISIS campaign. As the campaign transitions from clearing ISIS-held territory to a focus on stabilizing the region, activities such as training local security forces, enabling local governance, and conducting counterterrorism operations will help prevent a power vacuum in Northeast Syria and a resurgence of ISIS. We are working with our Coalition partners to ensure we meet Turkish security concerns as well as protect those that fought with us against ISIS.

Afghanistan. Along with our Allies and coalition partners, we are setting the military conditions to fully support an Afghan-led, Afghan-owned peace process. Coalition forces train, advise, and assist Afghanistan National Security Forces, as well as provide critical aviation support, intelligence, and other capabilities to make them a more effective fighting force.

In addition to readiness gains from improved force management, DoD budgets in recent years helped arrest the decline of unit readiness across the Joint Force. In FY18 and FY19, we increased the quality and quantity of unit training, improved personnel deployment availability, increased stocks of key munitions, streamlined aviation depot processes, and added capacity to address shortfalls in maintenance and sustainment functions. PB20 enables us to continue on this path, but a decade of neglect will require years to correct. A full restoration of our readiness will require sustained, sufficient, and predictable funding into the future.

A MODERN AND MORE LETHAL FORCE FOR TOMORROW

The NDS calls for a more lethal force that expands the competitive space to meet critical challenges and key operational problems. The PB20 request invests in a more lethal force by funding efforts to modernize current capabilities and expand warfighting capacity.

A primary modernization priority is our aging nuclear enterprise. A large-scale nuclear attack poses an existential threat to the United States. U.S. nuclear forces are the indispensable means of addressing this threat, making nuclear deterrence the highest priority mission of the Joint Force. The 2018 Nuclear Posture Review established the elements of the nuclear modernization program—a program that is necessary, prudent, and affordable given the nature and evolution of the threats we face. PB20 fully funds that program.

PB20 also enhances joint warfighting capacity by fielding the capabilities we need to project power. In the air, continued procurement of 5th generation fighter aircraft allows us greater flexibility to respond globally today and in the future. At sea, recapitalizing the naval fleet with modern and lethal platforms sustains undersea, surface, naval aviation, and fleet logistic advantages while increasing investments in unmanned, autonomous maritime capabilities. And on the ground, enhancement of long-range precision fires, development of the next generation combat vehicle, and investments in close combat systems ensure our Soldiers and Marines' overmatch on the battlefield.

Space continues to be a priority area for modernization and innovation. In response to the evolution of threats to U.S. assets in space, we will establish the U.S. Space Force Headquarters, U.S. Space Command, and Space Development Agency. To deter our adversaries, we are pursuing organizational constructs, systems, and capabilities that will produce a more lethal, resilient, and agile Joint Force. Additionally, this budget request includes substantial investments in Missile Warning, launch platforms, Space Situational Awareness, Space Control, and enhancements to Position, Navigation, and Timing.

In the cyber domain, PB20 allows the Joint Force to further develop and employ the necessary tools to defend DoD infrastructure, compete below the level of armed conflict, and operate as part of broader joint operations. This budget request increases our investments in required

capabilities to operate effectively in cyberspace and maintain our competitive advantage against near-peer adversaries.

While improving lethality in the near term, we will continue to develop and design a future Joint Force that can fight and win against any adversary on any battlefield of tomorrow. A joint concept-driven, threat-informed approach to capability development—leveraging wargames, exercises, and experimentation—allows us to more deliberately evaluate needs of the current force and prioritize future requirements. Our refined approach to Force Development and Design allows senior leaders to pair emerging technologies with optimal organizational constructs and innovative operating concepts to plan and execute joint operations now and in the future.

No investment is more important to the effectiveness of our future force than the development and education of our future leaders. The nation's ability to compete, deter, and win requires leaders who have the vision, intellect, and critical thinking skills to employ, develop, and design the future Joint Force. With a special emphasis on revitalization of the War Colleges, our leader development program is designed to fully support the development of these strategic thinkers and future senior leaders of the U.S. Armed Forces.

CONCLUSION

This is my fourth and final appearance before this committee in support of the Department's annual budget request. I thank you for the great honor of representing your Soldiers, Sailors, Airmen, and Marines.

More importantly, I would like to thank the committee for all you have done to support our troops, as well as their families. In visits to the Joint Force at bases and posts, stateside and around the world, I continue to be amazed by their spirit and dedication to the mission. Through the support of the Congress and the people you represent, our service members in uniform will prevail in our current conflicts and be prepared to confront the threats the United States will surely face in the future.

Together, we have honored our solemn obligation to never send our sons and daughters into a fair fight. With your continued support for sustained, sufficient, and predictable funding, we never will.

General Joseph F. Dunford, Jr.
Chairman, Joint Chiefs of Staff

General Joseph F. Dunford, Jr. is the 19th Chairman of the Joint Chiefs of Staff, the nation's highest-ranking military officer, and the principal military advisor to the President, Secretary of Defense, and National Security Council.

Prior to becoming Chairman on October 1, 2015, General Dunford served as the 36th Commandant of the Marine Corps. He previously served as the Assistant Commandant of the Marine Corps from 2010 to 2012 and was Commander, International Security Assistance Force and United States Forces-Afghanistan from February 2013 to August 2014.

A native of Boston, Massachusetts, General Dunford graduated from Saint Michael's College and was commissioned in 1977. He has served as an infantry officer at all levels, to include command of 2nd Battalion, 6th Marines, and command of the 5th Marine Regiment during Operation IRAQI FREEDOM.

General Dunford also served as the Assistant Division Commander of the 1st Marine Division, Marine Corps Director of Operations, and Marine Corps Deputy Commandant for Plans, Policies and Operations. He commanded I Marine Expeditionary Force and served as the Commander, Marine Forces U.S. Central Command.

His Joint assignments include duty as the Executive Assistant to the Vice Chairman of the Joint Chiefs of Staff, Chief of the Global and Multilateral Affairs Division (J-5), and Vice Director for Operations on the Joint Staff (J-3).

A graduate of the U.S. Army Ranger School, Marine Corps Amphibious Warfare School, and the U.S. Army War College, General Dunford also earned master's degrees in Government from Georgetown University and in International Relations from the Fletcher School of Law and Diplomacy.

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 26, 2019

QUESTIONS SUBMITTED BY MR. SMITH

Mr. SMITH. Directive report language from the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. 113–291, recommended the Department of Defense, to the extent practicable, model their policies and checklists on the policy and checklist relating to services contract approval then used by the Department of the Army. Section 852 of the National Defense Authorization Act for Fiscal Year 2018, P.L. 115–91 encouraged the use of “standard guidelines . . . for the evaluation of requirements for services contracts” as part of the improved planning and budgeting processes for services contracts enacted that year. The Department of the Army Checklist was a comprehensive compilation of the statutory prohibitions against contracting work performed by Federal Government employees.

How has the Department and each of the Military Departments and Defense Components complied with these requirements beyond issuing the Handbook for Contract Functions Checklists issued on May 2018?

What steps has the Department taken to ensure they are meeting the expressed “purpose [of Section 851 and the prior directive report language] of standardizing the requirements evaluation required by section 2329 of title 10”?

What steps are being taken to ensure greater consistency in understanding and complying with the statutory requirements that had been addressed in the Army checklist and currently addressed in your Handbook for Contract Functions Checklists?

Is your Handbook directive in nature or can Defense Components make exceptions in how they apply it? Is the Army checklist still in use?

Secretary SHANAHAN. The military departments and Defense components have collaborated extensively on the revision of the Department of Defense Instruction (DODI) 5000.74 Defense Acquisition of Services that incorporates 10 United States Code section 2329 provisions and further improvements needed to modernize services acquisitions since the DODI was published on January 5, 2016. The revised DODI 5000.74 is undergoing pre-publication review; however, in the revision the Services Requirement Review Boards (SRRBs) the revision does address the requirements review process to include consideration of total force management and policies and procedures and available resources. Once this issuance is published, the evaluation of requirements for services contracts will be further detailed in the Defense Acquisition Guidebook, Chapter 10, (<https://www.dau.mil/tools/dag>) and its content incorporated in DAU training courses in Services Acquisition. The Office of the Under Secretary for Acquisition and Sustainment (OUSD(A&S)) has provided for standardized training on the subject of SRRBs and requirements evaluation at Department of Defense (DOD)-wide Services Acquisition conferences; in December 2015, June 2016, March, June and August of 2017, in June 2018, and February 2019. In attendance were the military component senior services managers, their senior staff, and other requirements and contract managers. Additionally, the OUSD(A&S) staff has presented and/or participated in mock SRRB panels at component conferences. To also address standardized training, in July 2017, the Director of Defense Pricing and Contracting (DPC), formerly Defense Procurement and Acquisition Policy, published the DOD Handbook for the Training and Development of the Services Acquisition Workforce, to address the training and development of the DOD workforce engaged in the procurement of services, including personnel not designated as members of the defense acquisition workforce. Once published, the revised issuance provides for functional services managers training in accordance with this memorandum. In May 2018, DPC published the DOD Handbook of Contract Function Checklists for Services Acquisition which provides recommendations for contract function checklist questions. The Handbook is not directive in nature; rather it provides recommended contract function checklist questions that may be used in conjunction with military departments and Defense component workload analyses, contract services documents, training materials, data, and inventories. DOD components may issue additional guidance and implementing instructions to meet their unique contract function needs associated with services acquisitions. The Army

is still using their checklist today. Components are encouraged to recommend changes/improvements to the DOD Handbook.

QUESTIONS SUBMITTED BY MR. LANGEVIN

Mr. LANGEVIN. Secretary Shanahan, as we have discussed, I am concerned about the security of DOD data on contractor networks, particularly “tier three and four suppliers” as you’ve described them. Which office within DOD is best situated to issue definitive guidance about contractor data security? Which is best situated to ensure compliance with any such guidance? What additional resources can we provide to subcontractors to secure their networks, and who should have the responsibility to do so?

Secretary SHANAHAN. This is one of the highest priorities within the entire Department of Defense (DOD). The Office of the Under the Secretary of Defense for Acquisition and Sustainment (OUSD (A&S)) is the best situated to provide guidance and compliance for contractors, and they currently have many efforts underway. One of these efforts lines right up with security of the DOD data on contractor networks it is called the Cybersecurity Maturity Model Certification (CMMC). Currently, we are working with Johns Hopkins Applied Physics Lab (APL) and Carnegie Mellon Software Engineering Institute (SEI), with our industry partners such as the Defense Industrial Base (DIB) Sector Coordinating Council (DIB SCC), Aerospace Industries Association (AIA) and others to combine various cybersecurity standards (such as NIST 171 & 53, ISO 27001 & 32, AIA NAS9933) and others into one unified standard for cybersecurity known as the CMMC. The CMMC will create requirements for security and allow third-party audits and certifications of the security of contractor networks and processes.

Another effort is out of the Office of the Under Secretary of Defense for Intelligence (OUSD(I)), which is leading a supply chain illumination pilot program to enhance information sharing with cleared defense contractors. The pilot program utilizes unclassified, open source data available for a variety of Major Defense Acquisition Programs (MDAPs). The open source findings will be ingested into a classified database to create an all-source product to be shared for the purpose of ensuring the security or integrity of supply chain of these military programs. DOD is expanding protections over Controlled Unclassified Information (CUI) within private industry. The OUSD(I) has been actively engaged with the CUI Executive Agent at the Information Security Oversight Office (ISOO), the DOD Components, and other agencies in the Executive Branch to develop a viable plan and policy to implement appropriate safeguards for both Federal and non-Federal systems. These initiatives will support primes and the subcontractors to better secure their networks and assist the Department in ensuring the security of the supply chain. We are giving the industry the tools to secure not only DOD data but their own.

QUESTIONS SUBMITTED BY MR. GARAMENDI

Mr. GARAMENDI. You’ve noted that Russia is modernizing nuclear capabilities outside of the New START Treaty, yet the vast majority of Russia’s strategic nuclear arsenal is still deployed on ICBMs, SLBMs, and heavy bombers—all types of weapons limited by New START. Is New START in the U.S. national security interest?

General DUNFORD. The Department supports the pursuit of an arms control agenda, which manages the risk of miscalculation and escalation among nuclear powers.

Mr. GARAMENDI. The 2018 Nuclear Posture Review states that Russia has an “escalate to deescalate” policy regarding the potential use of nuclear weapons if they were losing a conventional conflict. Recently, Russian Ambassador to the United States Anatoly Antonov publicly denied that the Russians have such a doctrine. To the best of your knowledge, have you or any of your counterparts in the Administration ever asked their Russian counterpart about whether or not they have an “escalate to de-escalate” policy? If so, what was the response?

General DUNFORD. As the Nuclear Posture Review describes, we assess “Moscow threatens and exercises limited nuclear first use, suggesting a mistaken expectation that coercive nuclear threats or limited first use could paralyze the United States and NATO and thereby end a conflict on terms favorable to Russia.” Additional detail can be made available in a classified forum. I have met with my Russian counterpart, General Valery Gerasimov, several times—most recently in March 2019. During our meetings, we exchanged views on the state of U.S.-Russia military relations and discussed effort to improve strategic stability between the U.S. and Russia. Conversations over doctrine are an important aspect of military dialogue and confidentiality is essential to the fidelity of our continued communications.

Mr. GARAMENDI. In your conversations with General Gerasimov, Chief of the Russian General Staff, has the New START Treaty been discussed? If so, how many times? Has the Russian military expressed interest in extending New START?

General DUNFORD. I have met several times with my Russian counterpart, General Valery Gerasimov, most recently in March 2019. During our meetings we exchanged views on the state of U.S.-Russia military relations and discussed a range of potential options all of which require the full compliance of both sides to the treaty.

QUESTIONS SUBMITTED BY MS. SPEIER

Ms. SPEIER. You noted in your testimony that arms control has value “if you can avoid having to develop something you don’t need.” What systems were you referring to? What systems might the United States avoid developing should we reach agreement with Russia? Is the Department currently evaluating options for any reductions in nuclear systems through arms control?

Secretary SHANAHAN. Arms control can contribute to U.S., allied, and partner security by helping to manage strategic competition among states. In my testimony, I did not have any specific systems in mind, but today we face an evolving and uncertain international security environment that includes an unprecedented range and mix of threats, including in the conventional, nuclear, space, and cyber domains. The United States remains willing to engage in a prudent arms control agenda, and we remain open to future negotiations as conditions permit and where the potential outcome improves the security of the United States, our allies and partners.

QUESTIONS SUBMITTED BY MR. GALLEG0

Mr. GALLEG0. Following collisions involving USS *Fitzgerald* and USS *John S. McCain*, the Navy took comprehensive action including assessing problems related to crew fatigue, implementing changes to watch rotations and workload, but also firing the 7th Fleet Commander. Why should flag officers be punished for the systematic failings that led to those collisions but general officers escape punishment for the systematic failings that contributed to the Niger ambush disaster?

Secretary SHANAHAN. I am committed to ensuring that a fair, thorough, and accurate review is conducted to inform the process of determining whether any additional administrative accountability measures should be imposed. That’s why I have initiated a new, narrowly scoped review of the accountability measures that have been imposed related to the events in Niger on October 4, 2017. The review will be led by a four-star officer. The reviewing official will analyze the investigation reports on the incident and provide me with a recommendation regarding the appropriateness of accountability measures taken thus far and whether any additional administrative accountability measures should be imposed.

Mr. GALLEG0. In your verbal testimony, you indicated that discipline and commendation decisions regarding the Niger ambush would be made “soon.” Do you intend to allow officials or officers who may be responsible for failings that led to the disaster to retire rather than face reprimand?

Secretary SHANAHAN. It would be inappropriate to speculate about the nature and timing of any additional administrative accountability measures while the review is ongoing.

Mr. GALLEG0. I understand that DOD has decided that it will not pull money from housing, dorms, or other living facilities, or any projects awarded in FY2019. I understand this decision from a public relations perspective, but not from an operational perspective. In other words, if there really is a national emergency at the border, why are we going into a scrap for money while saying “this dorm is off limits, or that account is off limits”? If this were a bona fide national emergency, wouldn’t everything be on the table?

Secretary SHANAHAN. The Department applied the following criteria to identify the potential pool of sources of military construction funds:

- No military construction projects that already have been awarded, and no military construction projects with FY 2019 award dates will be impacted.
- No military housing, barracks, or dormitory projects will be impacted.
- The pool of potential military construction projects from which funding could be reallocated to support the construction of border barrier are solely projects with award dates after September 30, 2019.

Since housing infrastructure is fundamental to maintaining quality of life for service members and is an integral component of readiness, no military housing, barracks, or dormitory projects will be considered.

Mr. GALLEG0. The committee was told last week that you will be providing your judgment over which military construction projects at the border “are necessary to support such use of the armed forces.” General O’Shaughnessy told the SASC last month that there is no military threat at the southern border. With that lack of a threat and with DOD personnel in a supportive role, how would a wall be necessary to support the use of the armed forces in any way?

General DUNFORD. On February 15, 2019, in accordance with the National Emergencies Act, the President issued a Proclamation declaring his determination that the crisis at the southern border is a national emergency that requires the use of the armed forces. This declaration made available the authority in 10 U.S.C. 2808, which authorizes the Secretary of Defense to undertake military construction projects to support the use of the armed forces in connection with the national emergency. My preliminary assessment, which was provided to the Acting Secretary of Defense on February 11, 2019, is that military construction projects can reasonably be expected to support the use of the armed forces, including by enabling the more efficient use of DOD personnel, and ultimately reduce the demand for military support over time.

QUESTIONS SUBMITTED BY DR. DESJARLAIS

Dr. DESJARLAIS. Currently, the Guard has 16 space units operating in 8 states with more than 1,200 Guardsmen, fulfilling a vital role in the space mission. With that said, can you elaborate on the complexities that you’re referring to and what they mean for the Guard’s role in the Space Force? Can you definitively say that the Guard will be in the Space Force? If so, what role do you foresee the Guard’s playing?

Secretary SHANAHAN. Today, the National Guard units provide strategic depth for U.S. space operations and their role in space will continue. The Department is currently conducting the detailed planning to determine the best organizational structure for the Space Total Force and will provide a legislative proposal for consideration with the FY 2021 National Defense Authorization Act.

QUESTIONS SUBMITTED BY MR. KIM

Mr. KIM. We’ve heard in numerous hearings about the importance of a whole-of-government approach to stabilizing the Middle East region and defeating ISIS. Can you share what State and USAID are doing in Syria? How many State and USAID personnel are on the ground in northwest Syria and Iraq?

Secretary SHANAHAN. The State Department and U.S. Agency for International Development (USAID) are engaged in diplomatic and stabilization activities in northeast Syria to consolidate military gains against ISIS and support local, representative governance structures. These stabilization activities include helping restore essential services (water, power, waste management, health, and education), and removing rubble and explosive hazards of war to enable the safe and voluntary return of Syrians to their homes. The activities are managed by State and USAID’s Syria staff, who continue to perform their assistance oversight responsibilities from their permanent posts in Turkey and Jordan. The Department of Defense is strongly supportive of these activities. There were up to 10 State Department and USAID personnel forward deployed in northeast Syria until December 2018 when they were temporarily relocated. For any further details, I refer you to the State Department and USAID. State and USAID have not deployed staff to northwest Syria since the start of the conflict.

Mr. KIM. Fourteen former regional combatant commanders recently said “[d]iplomacy and development are essential to combating threats before they reach our shores.” In your opinion, are State and USAID stabilization operations sufficiently manned and resourced to combat those threats? How much funding was provided through the State and USAID budgets? Has that amount decreased since FY2018? Why?

Secretary SHANAHAN. The Department of Defense strongly agrees that diplomacy and development are essential to stabilize fragile areas and to prevent conflict. The Stabilization Assistance Review, published in May 2018 and endorsed by the Secretary of State, the Secretary of Defense, and the U.S. Agency for International Development (USAID) Administrator, clarified that the Department of State is the lead Federal agency for stabilization activities. The Department of Defense has been

working continuously with the Department of State and USAID to ensure that we have planned ahead to have the right mix of the “three D” community—Diplomacy, Development, and Defense—in place to stabilize fragile and conflict-affected areas. I refer you to the State Department to comment on the amount of overall funding in the State Department and USAID budgets and if those amounts have increased or decreased.

Mr. KIM. How were State and USAID enabled to be forward in the field? Was there an MOA with the Department to accomplish this? Can an MOA be used elsewhere if necessary?

What will happen to that State/USAID presence as you execute a drawdown of forces?

If the areas they support are allowed to devolve security-wise, who would provide security?

Secretary SHANAHAN. State Department and U.S. Agency for International Development (USAID) personnel were co-deployed in northeast Syria after an exchange of memoranda that specified the support the Department of Defense (DOD) would provide to State Department and USAID personnel. This support largely included local force protection, housing, medical care, life support, and transportation. The Stabilization Assistance Review, published in May 2018 and endorsed by the Secretary of State, Secretary of Defense, and the USAID Administrator, recommended that a Global Memorandum of Agreement on co-deployment of State and USAID personnel with DOD be signed to expedite deployments in future stabilization situations globally. The President has directed that DOD leave a reduced U.S. force presence in Syria to prevent the resurgence of ISIS. Even as we draw down forces in Syria, DOD is postured to support a State Department and USAID presence to execute diplomatic, stabilization, and humanitarian assistance work. I refer you to the State Department and USAID for comment on the status of their future presence. Security for areas in northeast Syria is currently provided by Syrian Democratic Forces.

QUESTIONS SUBMITTED BY MS. SHERRILL

Ms. SHERRILL. The Improved Turbine Engine Program (ITEP) remains the Army’s #1 Aviation Modernization priority program that will save a combined \$1 billion per year in reduced fuel, maintenance and operating costs while increasing the capability of today’s Black Hawk and Apache helicopters and provide engines for the Future Vertical Lift (FVL) program. On February 1st, the U.S. Army awarded an Engineering and Manufacturing Design (EMD) contract for the ITEP program to the General Electric Company. On February 19th the Advanced Turbine Engine Company (ATEC) a 50/50 joint venture between Honeywell and Pratt & Whitney, filed a protest with the General Accountability Office (GAO) on the award.

I understand DOD cannot comment on the award due to the protest, but I request clarification on ITEP specifically: 1) What is the purpose of the Improved Turbine Engine Program (ITEP)? 2) To what extent does ITEP improve the overall performance of the Army’s Apache and Black Hawk fleets? 3) How does ITEP factor into the Army’s Future Vertical Lift? 4) Were engine power, engine growth, specific fuel consumption, reliability, and maintenance key elements for ITEP? Were there any other key elements? How were these elements prioritized? 5) What is the status of the Army’s turbine engine-manufacturing industrial base and specifically combat helicopters? How does a robust industrial base impact innovation and cost? Do we have a sufficiently robust industrial base to meet future turbine engine requirements in the future? 6) How does the prioritization of price over performance or capabilities during our acquisition process affect long-term risk to the warfighter?

Secretary SHANAHAN. 1) The purpose of the ITEP is to deliver the next generation turbo-shaft engine for the Black Hawk (H-60), Apache (AH-64E), and in the future the Army’s Future Vertical Lift Future Attack Reconnaissance Aircraft (FARA). Compared to the current H-60 and AH-64 engine, the Improved Turbine Engine will increase operational reach and lethality and provides increased power, fuel efficiency and reliability while fitting in the current engine bays of the Black Hawk and Apache aircraft.

2) The ITEP will improve the overall performance of the Army’s Apache and Black Hawk fleets by regaining lost capability due to aircraft weight growth and significantly increasing aircraft range, payload, and endurance over the current engine.

3) The requirement is for FARA to include the ITEP Engine when both program efforts mature.

4) Engine power, engine growth, specific fuel consumption, reliability, and maintenance were all considered for ITEP. All technical requirements/key elements were

included in the System Requirements Document (SRD) which was attached to the ITEP EMD Request for Proposal (RFP) and thoroughly evaluated by the Army. Were there any other key elements? All technical requirements/key elements were included in the SRD. How were these elements prioritized? The EMD contract award is currently under a protest with the Government Accountability Office. Until this is resolved, specifics regarding evaluation criteria cannot be provided. However, engine power, future engine improvements, fuel consumption, reliability, and maintenance were all considered for ITEP. All technical requirements/key elements were included in the SRD which was attached to the ITEP EMD Request for Proposal and thoroughly evaluated by the Army.

5) The commercial and military rotorcraft turboshaft engine industrial bases are healthy with no identified lower tier supply chain risks that are of significant substance to program execution risk. All identified supply chain risks are being managed and/or mitigated through normal Industrial Base surveillance and risk mitigation techniques. How does a robust industrial base impact innovation and cost? Combat helicopter turboshaft engine innovation and cost are driven by DOD requirements (e.g., better fuel efficiency, power, etc.) and the industrial base's ability to meet those requirements. The commercial sector continuously utilizes advanced manufacturing techniques and processes, such as additive manufactured parts, ceramic matrix composites, and other advance materials, to achieve key performance requirements. While cost is impacted by many factors, the key innovation items mentioned above will reduce piece part count, streamline manufacturing, and improve performance and reliability, which will have direct impacts on production and operations and sustainment costs. Do we have a sufficiently robust industrial base to meet future turbine engine requirements in the future? The combat helicopter turbine engine industrial base was examined in-depth in 2012, 2016, and twice in 2018 with focus on support of the ITEP program and the Future Vertical Lift (FVL). Commercial and military engines are usually very similar in configuration, which leads to a stronger industrial base since a manufacturer will be supporting both users at the same time. These examinations consistently determined that this industrial base segment is vital, healthy and prepared to support upcoming and emerging Army aircraft programs.

6) For ITEP, the Army's EMD competition used the best value approach to manage long term risk to the Warfighter, and appropriately weighted price and non-price evaluation factors.

QUESTIONS SUBMITTED BY MRS. LURIA

Mrs. LURIA. The 2018 National Defense Authorization Act required your department to submit a report on the vulnerabilities to military installations and combatant commander requirements resulting from climate change over the next 20 years including a list of the ten most vulnerable military installations within each service and to include an overview of mitigations that may be necessary and the cost of such mitigations. Instead your department submitted a report that only provides a list of military bases it characterizes as mission assurance priority bases and somehow omits the Marine Corps entirely even though the damage caused at Camp Lejeune is expected to cost \$3.6B. It also doesn't address substantial mitigations or any cost associated with these mitigations. Why did your department not comply with the direction of Congress?

Secretary SHANAHAN. Using the existing list of installations based on the importance of their operational roles (i.e., the Mission Assurance Priority installation list) ensured that climate considerations were connected to continued operational viability and resilience requirements. This Mission Assurance focus also allowed the report to avoid installations, like coastal recreation facilities, that may be proximate to potential flooding but are not mission-critical. Marine Corps installations were considered but ultimately not included in the Mission Assurance Priority Installation list; we are happy to discuss additional details about this list in a secure environment. We have since sent over a top ten list (transmitted to HASC on March 22, 2019) for each Military Department derived from the original list of 79 Mission Assurance Priority Installations. This list includes scoring and weighting of the five climate-related hazards (recurrent flooding, wildfire, drought, desertification, and permafrost thaw) based on immediacy of the threat. The report did not include the costs of climate mitigation because climate resilience is a cross-cutting consideration that spans all levels and lines of effort and is not framed as a separate program, precluding a discrete identification of costs.

Mrs. LURIA. Frequently, coastal flooding causes several of the gates entering Naval Station Norfolk to be impassible and one of the main access roads to Oceana

becomes impassible with even modest rainfall. In reviewing the budget submission, I could only find one entry for Defense Access Road improvements at Fort Bliss, which is not even one of the 79 installations listed in your report. Why did you not include additional funding for defense access roads at the installations most affected by climate change?

Secretary SHANAHAN. The Defense Access Road (DAR) program is designed to mitigate sudden or unusual defense impacts, such as a large growth in on-base population resulting from a new mission, by allowing the Department of Defense (DOD) to pay a share of the cost of public highway improvements made necessary by those impacts. This program only applies to public roads that have been certified as important to national defense per 23 U.S.C. § 210. As such, not every public roadway that provides access to a military reservation is classified as a defense access road. To date, the military departments have indicated that they do not currently have any flood-prone locations creating a national security risk to transportation access for military installations. In many instances, DOD has several access points to its installations, and the impact of flooding that prevents access to one part of an installation would be mitigated by rerouting traffic to the other access points. State and local highway authorities are responsible for developing and maintaining public highways to all permanent traffic generators, including defense installations. It is the responsibility of Federal, State, and local Department of Transportation officials to monitor public roadways and address any impacts, including flooding, in the planning of their State and local transportation improvement plans. Requiring DOD to fund infrastructure improvements that are not deemed critical to national defense in local municipalities due to flooding or other climate events would redirect much-needed readiness funding to responsibilities that should be shouldered by the State and local governments.

Mrs. LURIA. Your own report stated “The effects of a changing climate are a national security issue with potential impacts to Department of Defense (DOD or the Department) missions, operational plans, and installations,” yet your department does not appear to be taking this national security issue seriously given your lack of investment in existing infrastructure and research and development. How much funding is allocated in your R&D budget to the study of the effect of climate change on DOD installations?

Secretary SHANAHAN. The Strategic Environmental Research and Development Program includes the Resource Conservation and Resiliency Program Area. This program area contains a research and development line that develops tools and models for climate change impact and vulnerability assessment and adaptation strategies for Department of Defense installations. In Fiscal Year 2019, this program is funded at \$8 million. For Fiscal Year 2020 the Department is planning on allocating \$5.4 million, as a number of projects were initiated four to five years ago and will be completed in the near future. More broadly, the Department considers resilience in the installation planning and basing processes, to include impacts on built and natural infrastructure. The Department is incorporating climate resilience as a cross-cutting consideration for planning and decision-making processes, and continues to be proactive in developing comprehensive policy, guidance, and tools to ensure installations are resilient in the face of a variety of threats and conditions—weather, climate, natural events, disruptions to energy or water supplies, and direct physical or cyber attacks.

QUESTIONS SUBMITTED BY MS. TRAHAN

Ms. TRAHAN. If the transgender ban proceeds as planned, I have several questions about how it will be implemented: 1. Will the Pentagon exempt those who are currently in the enlistment process or in a service academy or a commissioning program? 2. The grandfather clause applies to current service-members. However, will it continue to apply to those who plan to re-enlist? 3. Will their grandfathered status carry over or will they be re-evaluated?

Secretary SHANAHAN. 1. Current policy does not represent a ban on transgender service, but rather accession and retention policies concerning the medical condition of “gender dysphoria.” The policy specifically provides that persons will not be denied accession or retention solely on their gender identity, to include prohibiting administrative separation based solely on gender identity. Individuals who prior to April 12, 2019, were either contracted for enlistment or selected for entrance into an officer commissioning program through a selection board or similar process and were medically qualified for military service in their preferred gender are considered exempt from the new policy. Similarly, contracted ROTC and military service acad-

emy cadets/midshipmen with a diagnosis of gender dysphoria confirmed by a military medical provider prior to April 12, 2019, are exempt and may transition.

2. Per the April 12, 2019 policy, a service member who is exempt from the new policy may be retained without a waiver. An exempt service member is considered from that point forward to be exempt and may not have their exempt status revoked.

3. Under the new policy, a service member's exemption status cannot be revoked, and the member cannot be separated, discharged, or denied reenlistment or continuation of service solely on the basis of his or her gender identity or gender transition.

Ms. TRAHAN. The DOD budget request for the Space Force initially estimates a \$72.4 Million cost in FY2020 ramping up to a full operational capability cost in FY24 of \$500 Million, or 0.01 percent of the DOD budget overall, comprising up to 15,000 personnel. 1. The Pentagon's Space Force legislative proposal—Section 1707—states that civilian employees may be transferred “on a voluntary or involuntary basis” in your “sole and exclusive discretion”? That sounds like a blank check. Why does the Pentagon need authority to transfer potentially an unlimited number of civilian personnel to stand up the Space Force?

2. Are you concerned by the disruptive impacts on other important missions of the Department by transferring potentially thousands of personnel from the services to stand up the Space Force?

Secretary SHANAHAN. The Department would like to work with Congress on the right personnel authorities to meet the needs for personnel. The transfer authorities included in the Space Force proposal were modeled after the establishment of the Air Force in 1947. The Department proposed a phased approach to standing up the Space Force to minimize risk: establish the headquarters first to prepare for mission transfer and then transfer Air Force, Army, and Navy forces and missions. Our goal is to create a lean Space Force with minimal bureaucratic overhead. Almost all of the military and civilian personnel who would be transferred to the Space Force are performing space missions today in the existing military services. Unifying those personnel into a single branch of the armed forces dedicated to space would allow the limited space personnel we have today to focus on building the space doctrine, expertise, and capabilities we need for a warfighting domain.

Ms. TRAHAN. I'm interested in the levels of work being delegated from CYBERCOM to its Reserve units. To my understanding, the Guard and Reserve Components play a central role in DOD cybersecurity.

1. Do the National Guard and Reserve Components benefit from the same training standards and resources as Active Duty teams to fill these roles? a. Are these teams meeting CYBERCOM's readiness standards?

2. A niche job like cybersecurity requires niche recruiting. How is the Department revamping recruiting efforts for developing a skilled cyber workforce?

Secretary SHANAHAN. 1. All Cyber Mission Force (CMF) aligned Reserve Component (RC) forces are required to train to, and meet, the same joint standard, as active duty teams, as established by U.S. Cyber Command (USCYBERCOM). The long Cyber Mission Force training pipeline does challenge the ability of RC members to complete all of their training. In response, the Navy and Army are utilizing Mobile Training Teams for portions of the training pipeline. Additionally, Army Cyber Command, USCYBERCOM, and the Army National Guard successfully granted constructive credit for the Intermediate Cyber Common Core for over 60 Soldiers. At present time, the Air National Guard is the only Guard or RC organization performing national missions that require additional specialized training.

1a. All RC CMF forces meet Military Service established readiness standards. Combatant Commands do not establish readiness standards.

2. Each Military Service is best positioned to determine how to meet its recruiting mission. As the recruiting environment has become more challenging, each Military Service has experimented with innovative recruiting techniques, including niche recruiting, to maximize recruiting production. Furthermore, use of lateral entry and constructive credit have enabled the Military Services, including the National Guard and Reserves, to recruit individuals with experience or strong academic foundations in computer science and other technical degrees at a level more competitive with civilian employers. Ongoing collaboration with industry leaders to further the skill sets of these officers, also provides an incentive for individuals to consider military service. For the enlisted force, the Military Services, including the National Guard and Reserve, primarily select individuals without specific qualifications and train them to meet CMF requirements. These individuals normally are required to achieve high scores on the Armed Service Vocational Aptitude Battery, and may be administered additional testing to identify the best candidates for cyber occupations.

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General DUNFORD. 1. Yes, training requirements and standards for National Guard and Reserve cyber personnel match those required of the active duty components. Guard and Reserve members are fully capable of meeting DOD global cyber mission requirements due to the uniformity with respect to active duty training standards. a. Yes, National Guard and Reserve cyber personnel, particularly those with private sector expertise, are fully integrated into the Cyber Mission Force and form a critical component of the Defense Cyber Workforce. National Guard and Reserve cyber personnel are able to meet current readiness standards and will mirror the Active Component personnel in making organize, train and equip adjustments required to incorporate USCYBERCOM's evolving readiness standards, which focus on enhancing capability and capacity.

2. The Department has leveraged direct appointment and constructive credit appointments to bring highly qualified, trained, and experienced personnel into our workforce. Additionally, we have rolled out the cyber expected service personnel system to make our hiring actions more competitive with private industry.

